



Michigan Early Care and Education Workforce Study

2018

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The Michigan Department of Education / Office of Great Start funded this study. The views, conclusions, and recommendations presented in this report are those of the authors and not of the funders of this report.

Special thanks to Joy Milano and Kelly Bentley, the Michigan Department of Education, and to all the early educators who shared their insights, knowledge, and passion about the work that they do every day on behalf of children and families in Michigan.

Suggested citation:

Roberts, A., Le, V., Schaack, D., Franko, M., & Morgan, K. (2018). *Michigan Early Care and Education Workforce Study: 2018*. Denver, CO: Butler Institute for Families, Graduate School of Social Work, University of Denver.

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Key Terms

Administrator: a staff person in a community-based or publicly funded program who is in charge of administrative tasks. Administrators include directors, assistant directors, and public school administrators.

Assistant Director: a staff person within a licensed program who supports the administration of the program and is supervised by a director.

Assistant Teacher: a staff person who works in a community-based or publicly funded program who assists with classroom activities but is not the lead teacher. Assistant teachers are often referred to as teacher aides, staff aides, or paraprofessionals. For the purposes of this study, floater teachers and substitutes are also included as assistant teachers. Floater teachers and substitutes are staff who are not assigned to a particular classroom but move classroom to classroom to support classroom activities or to provide substitute coverage.

Community-Based Licensed Centers: early learning programs that are *not* publicly funded (i.e., public pre-kindergarten or Head Start). These programs can include nonprofit stand-alone centers and nonprofit centers affiliated with a larger social service agency, hospital, or college. It can also include for-profit stand-alone programs or chains.

Director: a staff person who works in a licensed program and who is in charge of the administration of an early learning program. Within the context of this study, directors may be owners of centers, they may be middle management within a larger agency, or they may serve as an executive director for their organization.

Early Care and Education (ECE): a broad term used to refer to the suite of programs, including pre-kindergarten, preschool program, child care centers, infant and toddler programs, Head Start, Early Head Start, and licensed family child care homes, that provide early learning and child care to children birth to age five.

Early Educator: a broad term used to describe the workforce as a whole, including directors, assistant directors, teachers, assistant teachers, and family child care providers.

Family Child Care Provider: a small business owner who operates a licensed home-based early learning program from his or her home. For the purpose of this study, this term includes family homes and group homes.

Great Start Readiness Program (GSRP): The State of Michigan's publicly funded pre-kindergarten program for eligible four-year olds.

Great Start to Quality: Michigan's quality rating and improvement system.

Head Start / Early Head Start: a federally funded ECE program with wraparound services offered to children from low-income families. Head Start serves preschool-aged children; Early Head Start serves infants and toddlers.

Infant/Toddler Teacher: a teacher who works in a classroom that serves children birth to age three.

Michigan Early Childhood Registry (MiRegistry): a registry for early child educators used to track employment, education, and training history and to find relevant training opportunities.

Michigan's Child Development and Care Program: a tuition subsidy funded through federal Child Development Block Grant dollars to Michigan's Department of Education to help eligible families pay for child care.

Preschool Teacher: a teacher who works in a classroom that serves children three to five years of age.

Public School Administrator: a staff person with administrative responsibilities in a public school setting. For the purposes of this study, this job role can include pre-kindergarten administrators or coordinators who may supervisor ECE classrooms in one school or in multiple schools within a district. This job role can also include principals who supervise pre-kindergarten and elementary school teachers.

Publicly Funded Program: early learning programs that receive at least some public funding. In the current study, this term includes Head Start / Early Head Start, Great Start Readiness Program, and/or programs in public schools.

T.E.A.C.H. Early Childhood® Michigan Scholarship Program: T.E.A.C.H. (Teacher Education and Compensation Helps) Early Childhood® is a scholarship program funded by the Michigan Department of Education in which early educators receive tuition support and a retention bonus paid by their ECE program after coursework completion and job requirements have been met.

Teacher: a staff person in a licensed center or publicly funded program who is in charge of a classroom. Teachers may be referred to as lead leaders, head teachers, or co-teachers.



Chapter 1

Introduction

Recently, early care and education (ECE) has received unprecedented policy attention due, in part, to positive associations between high-quality ECE and children's school readiness (Barnett & Lamy, 2013; Yoshikawa et al., 2013). Research indicates that the knowledge and skills of early educators are the most important ingredients in high-quality ECE (Whitebook, 2003). Thus, ensuring that Michigan has a well-prepared, well-supported, and thriving ECE workforce is of utmost concern.

Consequently, policy and funding efforts, such as Michigan's Race-to-the-Top Early Learning Challenge (RTT-ELC) Grant, have sought to elevate the quality of ECE programs, improve children's access to high-quality ECE, and build a coordinated and comprehensive early learning system. As a result of systematic efforts to improve the quality of ECE over the last several decades, many early educators have experienced an expansion in their job roles and responsibilities. Historically, the primary role for many early educators was to ensure children's health and safety and to nurture children's social development and early friendships. Today, many more early educators are tasked with facilitating children's emergent literacy, math, and science skills and preparing children for kindergarten. As efforts to expand access to ECE have proliferated, many early educators are also now called upon to meet the needs of an increasingly diverse population of children, including English language learners, children who have experienced trauma, and children with special health, behavioral, and learning needs (Sakai, Kipnis, Whitebook, Schaack, 2013).

Early educators in Michigan work in various settings, including the state's pre-kindergarten Great Start Readiness Programs (GSRP), federally funded Head Start and Early Head Start, community-based ECE centers, and licensed family homes and group homes. Despite the fact that many educators across ECE settings share common goals of fostering children's learning and development, the workforce, as a whole, is not cohesive. Variation in preparatory requirements is one of the most profound examples of the fragmentation of the workforce (IOM & NRC, 2015). For instance, in Michigan, the educational requirements for teachers working in Head Start and GSRP classrooms are markedly higher than in licensed child care settings. National studies

confirm this variation in the formal education and credentials of the ECE workforce (NSECE, 2013). Efforts to advance and align the knowledge and skills of the Michigan ECE workforce include developing a set of core competencies, implementing various in-service professional learning opportunities, and offering T.E.A.C.H. scholarships. However, these efforts are often challenged by a lack of detailed information about Michigan's ECE workforce regarding their basic characteristics, including demographics, employment, education, professional development needs, access to scholarships, and the supports needed to successfully complete a degree. Such information is needed to help decision-makers target policies, build a responsive professional development system, and better understand the investments needed to ensure an effective workforce across ECE settings.

Efforts to describe the ECE workforce are also guided by a growing national concern about the economic fragility and instability of the ECE workforce. Early educator wages are often compared to those of dog walkers and janitors, and typically do not reflect the professional nature of the work (Whitebook, Phillips, & Howes, 2014). Wages and benefits demonstrate further fragmentation of the field. A national study found an average hourly wage of \$19.50 per hour for state pre-kindergarten teachers working in public schools and a mere \$9.38 an hour for family child care providers. The same study documented a wage gap among early educators working with infants and toddlers and those working with preschool-aged children, in which preschool teachers made nearly \$9,000 more annually (NSECE, 2013). In addition, many early educators, especially if they work outside public school settings, have limited or no benefits, including health insurance, employer sponsored retirement savings accounts, or paid sick and vacation days (Whitebook et al., 2014). Median annual salaries often qualify early educators for public assistance in nearly every state (Whitebook et al., 2014). In a recent study of approximately 4,700 early educators in Colorado, 45% reported economic insecurity, 32% relied on public subsidies, and 24% were forced to take a second job to make ends meet (Schaack & Le, 2017a). As states, including Michigan, make concerted efforts to increase the educational requirements for early educators, research suggests that completing a degree and additional certifications do not often translate into substantially increased wages. Hourly wages among early educators with B.A. degrees were nearly half the average earnings of those with B.A. degrees in other industries (Whitebook et al., 2014).

In addition, the work environments for many early educators have not adapted to the changing landscape of the profession or to the professional needs of the workforce. Efforts to provide enriching instruction and meet the individualized needs of children have resulted in many early educators now conducting developmental screenings, referring children for services, meeting with special educators, planning curriculum across learning domains, conducting ongoing child observations and assessments, and working with coaches to improve their teaching practices. For many early educators, these enhanced duties are set against a backdrop of classrooms that are often understaffed, and where they have unreliable work schedules in which they are either sent home without pay if child attendance is low or they move in and out of different classrooms throughout the day to meet state teacher-child ratio requirements (Setodji, Le, & Schaack, 2012). Many also have limited or no paid planning time or paid professional development days (Whitebook et al., 2104). These workplace conditions may constrain early educators' abilities to deliver high-quality services to young children (IOM & NRC, 2015) and may contribute to

occupational burnout and turnover (Austin, Sakai, Dhamija, 2016). A recent study of family child care providers also found that these increased work expectations combined with the increased regulations of their programs are sources of occupational stress that often prompt providers not to obtain or renew their licenses, creating a shortage of family child care providers (Schaack & Le, 2017b).

Nationally, approximately 30% of center and school-based early educators leave their jobs each year (Whitebook et al., 2014), a figure four times higher than elementary school teachers (Rhodes & Huston, 2012). However, unlike elementary schools in which teacher turnover typically occurs between school years, teacher turnover in ECE occurs throughout the year and disrupts continuity within classrooms. Not only can turnover negatively impact classroom quality, children's relationships with teachers, and children's school readiness skills (Helburn, 1995), teachers and directors also cite it as one of their greatest sources of job stress (Schaack & Le, 2017b) that often prompts subsequent turnover (Whitebook & Sakai, 2003).

Increasingly, policy makers are recognizing that if ECE is to live up to its promises of preparing children for elementary school and beyond, it is critical to elevate the profession, specifically the policies and infrastructure that support the professional preparation and ongoing professional learning opportunities available to early educators, as well as the compensation and working conditions of the professionals in the field. Recognizing the importance of a thriving ECE workforce, the Michigan Department of Education / Office of Great Start (MDE/OGS) commissioned the present study of their ECE workforce conducted by the Butler Institute for Families, NORC, and the University of Colorado Denver (referred to henceforth as "the Research Team"). Due to the study being funded by RTT-ELC, the focus was specifically on the ECE workforce serving children birth to age 5. Specifically, the purpose of this study is to examine the qualifications and professional development needs, employment conditions, and well-being of Michigan's workforce across job roles, ECE settings, geographic locations, and age groups. By identifying the current strengths, gaps, and unmet needs in the field, policies and infrastructure may be developed to enhance the professional lives of the adults who serve Michigan's youngest children.

Specifically, this study was designed to broadly address the following questions based on a sample of early educators in Michigan:

1. What are their demographic and educational characteristics?
2. What are their professional development experiences and needs?
3. What salaries and benefits do they receive, and to what extent are the educators experiencing economic strain?
4. What are their working conditions, experiences of burnout, and turnover rates?

Methods

Recruitment

MDE/OGS provided the Research Team with a list of 9,084 active licensed ECE programs, including public school pre-kindergarten programs, Head Start and Early Head Start programs, community-based ECE centers, and group homes and family child care homes from across the state. Of these programs, administrator and family child care provider email addresses were available for 7,615 programs. The Research Team emailed administrators to request the names and email addresses of teaching staff who work in classrooms (e.g., teachers or assistant teachers) and administrative staff who oversee the day-to-day operations of a program (e.g., directors, assistant directors, principals, and pre-kindergarten coordinators). Group homes and family child care homes were also emailed and asked to provide contact information for any additional staff. A combination of 495 administrators and family child care providers responded and provided an additional 2,054 staff email addresses.

An invitation to participate in the study with a link to an electronic survey was emailed in English, Spanish, and Arabic to 2,549 early educators. If requested, paper surveys were mailed to educators (283 total). Additionally, a link to the survey was posted on the MDE/OGS Facebook page. This recruitment strategy resulted in a sample size of 685 early educators. Respondents received a \$10 gift card for their participation.

Sample

Of the 685 early educators participating in the study, 189 were classified as “administrators.” This group included directors, assistant directors, director/teachers (if the respondent indicated that they were primarily responsible for center operations), principals, and pre-kindergarten coordinators. Another 168 early educators were classified as “teachers” who have primary responsibility for classrooms. An additional 68 respondents were classified as “assistant teachers,” which included teacher aides, floater teachers, and substitutes. Of the teachers and assistant teachers, approximately 81% indicated that they work primarily in preschool classrooms and 19% indicated that they work primarily in infant toddler classrooms. Another 260 survey respondents were classified as “family child care (FCC) providers.” This group included providers who work in group homes and family child care homes.

Of the center and school-based early educators in the sample, 69% work in publicly funded programs, which includes Head Start, Early Head Start, the Great Start Readiness Program (GSRP), or work in programs with a combination of these funding sources. For the purposes of this study, we combined early educators who work in these publicly funded settings into one

group, which we refer to as “publicly funded” or “public” programs. The remaining 31% of early educators in the sample work in community-based programs that do not receive GSRP or Head Start funding. We refer to these settings as “community-based” or “community” programs.

For all regional analyses, Michigan was divided into four geographic regions—Western, Upper Peninsula (UP) and Northern Lower Peninsula (LP), Southeast, and Eastern or East Central. A list of counties that comprise each region can be found in Appendix A. Exhibit 1.1 shows the geographic distribution of the sample by job role.

Exhibit 1.1. Sample Size by Geographic Region and Job Role

	Administrator	Teachers	Assistant Teachers	FCC Providers
Western	50	29	14	94
UP and Northern LP	30	19	17	50
Southeast	67	66	14	80
Eastern or East Central	42	54	23	36

Instruments

A comprehensive survey was designed to capture various aspects of early educators’ professional experiences, tailored to specific job roles (e.g., administrators, teachers, and family child care providers). The Research Team collaborated with MDE/OGS, referenced extant literature, and drew from existing ECE workforce surveys to identify key constructs and measures. The resulting survey focused on the following areas:

Personal and Employment Characteristics, including demographic characteristics, such as age, gender, race/ethnicity, and primary language; and employment characteristics, including job role, tenure in current job and in the field, work schedule, sector, and program auspice (e.g., nonprofit or for-profit center).

Education and Professional Preparation, including formal education, major or area of study, and credentials. Teachers, assistant teachers, and FCC providers were also administered 15 questions that asked them to reflect on how prepared they feel to meet the needs of specific children and perform various teaching responsibilities. Analogously, administrators were asked 15 questions about their feelings of preparation to lead an ECE program. A factor analysis on the 15 items administrator measure resulted in three subscales: *Supervisory Tasks*, *Managerial Tasks*, and *Family-Related Tasks*. The coefficient alphas for these scales were 0.91, 0.83, and 0.75, respectively.

Professional Development Preferences and Barriers were captured using various measures. First, a six-item *Quality of Professional Development Support Scale* ($\alpha = .91$) assessed the extent to which teaching staff felt that their organization effectively supported their professional development (e.g., “The professional development that I receive is culturally appropriate and relevant to the populations I serve in my classroom”). The survey also asked all early educators about barriers they experience in accessing in-service professional development, the modality of professional development and higher education they prefer, whether they are currently enrolled in an institution of higher education, and the supports that they would need to advance their formal education.

Compensation was measured through various self-reported measures, including, wages, benefits received from their employer, the public subsidies that they receive, and whether they have a second job. Respondents were also administered three items from the *Financial Strain Scale* (Conger & Elder, 1994). The first two items tap into the general perception that financial resources are insufficient (e.g., “During the last twelve months, how much difficulty have you had paying your bill?”). The third item asks about 11 ways that the early educator has tried to economize to lessen their financial burdens (e.g., reduced or eliminated medical insurance because of financial need).

Center Characteristics, Turnover, and Wages were reported by administrators, specifically, the number of classrooms, by age group, in their programs; the number of staff they employ, by job role and age group of the children served; the number of turnover events that have occurred over the last twelve months, by job role and age group of the children served; how many positions they currently have open; and the average time it takes to fill open positions.

Classroom and Family Child Care Home Characteristics were reported by teaching staff and FCC providers, including the number of children in their classroom/home, the adult-to-child ratio, age group(s) served, children’s languages, hours and months of operation, and the composition of children in their classroom/home (e.g., how many have special needs, are English language learners, and are from low-income families).

Job Frustrations, Motivations, and Intentions were asked of all survey respondents, across job roles. Specifically, respondents were asked to identify the three most important factors that contribute to their motivation to stay in their jobs, their three greatest job frustrations, whether they plan on staying in their job for the next two years, whether their job provides opportunities for career advancement, and what conditions would need to change to promote staff retention.

Work Environment was reported by teaching staff using a 15-item scale that assessed dimensions of their organizational health and work climate. These items were drawn from two scales, *The Comprehensive Assessment of Organizational Health* (Potter, Leake, Longworth-Reed, Altschul, & Rienks, 2016) and the *Colorado Early Childhood Workforce Survey* (Schaack & Le, 2017c). Items administered were then subjected to a factor analysis that identified two underlying factors. The first factor, *Communicative-Supportiveness*, measured the extent to which teachers and assistant teachers perceive their organizations to have collegial relationships, adaptive communication,

and supportive and collaborative leadership. The second factor, *Bureaucratic-Unrest*, measured the extent teachers and assistant teachers perceived their organizations to have staff conflict, low staff morale, and top-down management approaches. The alpha coefficients for these scales were 0.83 and 0.75, respectively.

Burnout was measured by a nine-item shortened version of the *Maslach Occupational Burnout Inventory* (Maslach, Jackson, & Leiter, 1997) administered to all staff. This inventory assessed the extent to which early educators feel emotional exhaustion derived from their work, are depersonalizing their work as a result of job stress, and feel a sense of personal accomplishment in the work. Alpha coefficients were 0.58 for the *Emotional Exhaustion* scale, 0.77 for the *Depersonalization* scale, and 0.51 for the *Personal Accomplishment* scale.

Analysis

Missing Data. Approximately 89% of respondents completed the entire survey, and an additional 3% of respondents completed at least 50% of the survey. To address missing data, a multivariate model was used as a basis to impute 10 sets of plausible values, with the stipulation that the distributions of the imputed variables remain similar to the observed data. Model results were then aggregated across these multiply imputed datasets using standard procedures.

Descriptive Statistics. Descriptive statistics and cross-tabulations were calculated to provide an overview of the characteristics of the sample, aspects of the settings in which they work, their perceptions of their work lives and well-being, and barriers to higher education and professional development.

False Discovery Rate. In instances where key differences among types of teachers or service sectors were highlighted, we tested for statistically significant differences while controlling for the clustering of teachers within the same program. In addition, we adjusted our analysis for multiple comparisons. When many outcomes are examined, the likelihood of observing a statistically significant result due to chance increases. To mitigate this likelihood, we applied the false discovery rate (FDR) procedure and adopted an FDR criterion of 0.15 to identify significant differences (McDonald, 2014).

Study Limitations

There are several limitations to this study that suggest caution should be taken when interpreting results. First, it is important to note that little information is available about the population of Michigan's early educator workforce. Thus, we were unable to weigh the current sample based on key characteristics (e.g., job role, service sector) to adjust for their relative representation within the workforce. Second, this study only included programs from which we had an administrator email address and only included early educators for whom their

administrator responded to our initial request for staff email addresses. It is very likely that ECE programs without an email address on file and whose administrators did not respond to our request are in some ways different from those who do have email addresses or whose administrator did respond (e.g., more administrative staff available to be able to respond to emails, greater connection to quality improvement resources and funding, and the like). Therefore, the inferences drawn from this study should be restricted to early educators in the sample and generalizations should not be made to the population of all early educators or ECE programs in Michigan.

Organization of Report

This report consists of chapters on demographics and educational characteristics; professional development experiences and needs; compensation and financial well-being; and working conditions, burnout, and turnover. Chapter 6 offers conclusions and implications.

All regional analyses are located in the appendices, organized by content area.





Chapter 2

Demographic and Educational Characteristics

It is important to examine the demographic and educational characteristics of early educators in Michigan to describe who they are and how they relate to the children they serve. There has been a significant increase in the population of children whose primary language is not English, as well as students of color (Mack, 2017; Montemurri & Tanner, 2014). In 2017, approximately 33% of children were identified as children of color, with 16% of children identifying as black and 8% identifying as Hispanic or Latino (Annie E. Casey Foundation, Kids Count Data Center, 2018). However, it is unclear whether the ECE workforce has experienced commensurate shifts in their demographic composition. Given the growing body of evidence demonstrating that achievement, attitudinal, and behavioral outcomes are improved when a student's race/ethnicity matches that of his/her teacher's (Bates & Glick, 2013; Dee, 2005; Downer, Goble, Myers, & Pianta, 2016; Egalite, Kisida, & Winters, 2015; Wright, Gottfried, & Le, 2017), it is important to understand the current demographic characteristics of early educators and their ability to accommodate children who speak a language other than English.

It is also imperative to examine the educational characteristics of the workforce to better direct resources. Although Michigan has launched initiatives to increase the educational requirements for early educators, there may still be considerable variation in the attainment and credentials across settings, age groups of children served, and job roles. Previous research has found that center-based teachers were more likely to have a college degree than FCC providers, and teachers who served preschool-aged children were more likely to have a bachelor's (B.A.)¹ degree than teachers who served infants and toddlers (NSECE, 2013). Understanding the qualifications of the ECE workforce, and identifying the segments of the early educator population who may need additional resources to meet increasing educational requirements, can be used to target opportunities and supports.

¹ For ease of the reader, we refer to associate's, bachelor's, and master's degrees as A.A., B.A., and M.A. degrees, respectively, but we also include A.A.S./A.A.T., B.S., and M.S. degrees, respectively, in these groups.

Research Questions

The purpose of this chapter is to describe the demographic and educational characteristics of a sample of early educators in Michigan. This chapter addresses the following research questions:

1. What are the ages and experience levels of the sample?
2. What is the racial/ethnic composition of the sample?
3. What languages do early educators speak and to what extent do they match the languages spoken by children in their programs?
4. What are the educational attainment and credentials of the sample?

Results

What are the ages and experience levels of the sample?

Exhibit 2.1 provides the average age (including the standard deviation) and age range of early educators across job roles. The average age of early educators in this sample ranged from approximately 39 to 44 years, with no significant differences by job role. To estimate the portion of early educators who are at or approaching retirement age, the percent of educators who are age 55 or above is presented in Exhibit 2.1. Across job roles, 12–20% of early educators in this sample are approaching retirement age.

Exhibit 2.1. Descriptive Statistics for Age by Job Role

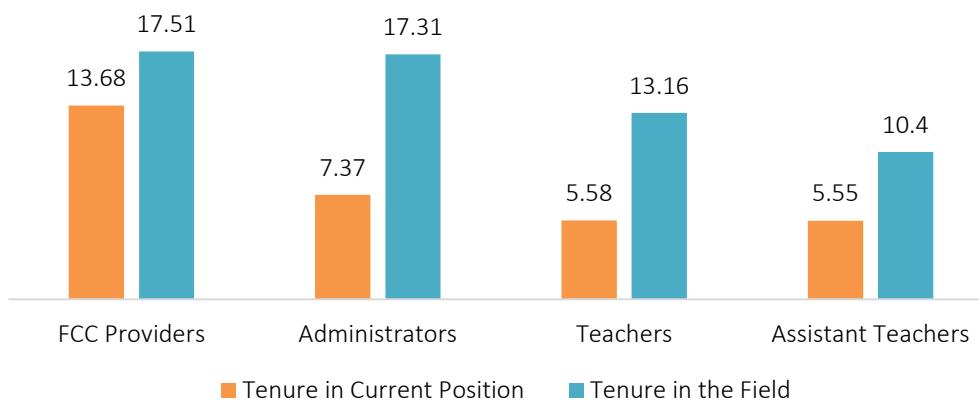
Job Role	M (SD)	Range	Percent 55+
FCC Providers	44.32 (10.86)	18–70	20%
Administrators	43.20 (10.99)	23–79	18%
Teachers	38.71 (11.57)	18–64	12%
Assistant Teachers	40.16 (14.12)	19–73	17%

Exhibit 2.2 shows educators' average years of experience in their current positions, as well as average years of experience in the ECE field, by job role. Across job roles, the sample demonstrated significant experience in the field, ranging from an average of approximately 10 years for assistant teachers to more than 17 years for FCC providers and administrators. FCC providers and administrators had significantly more experience in the field than teachers and assistant teachers. Notably, the sample has less experience in their current jobs than in the field, ranging from an average of 13.7 years in their current jobs for FCC providers to an average of 5.5 years for teachers and assistant teachers. FCC providers have been in their current jobs significantly longer than early educators in all other job roles. Among teachers who work in

community-based and publicly funded programs, there were no significant differences in age, tenure in current position, and tenure in the field

The median years of ECE experience for teachers in this sample is comparable to that observed for teachers nationally (10 years), but the median years of ECE experience for FCC providers in this study is higher than national estimates (i.e., 17.5 years compared to 13.7 years) (NSECE, 2013).

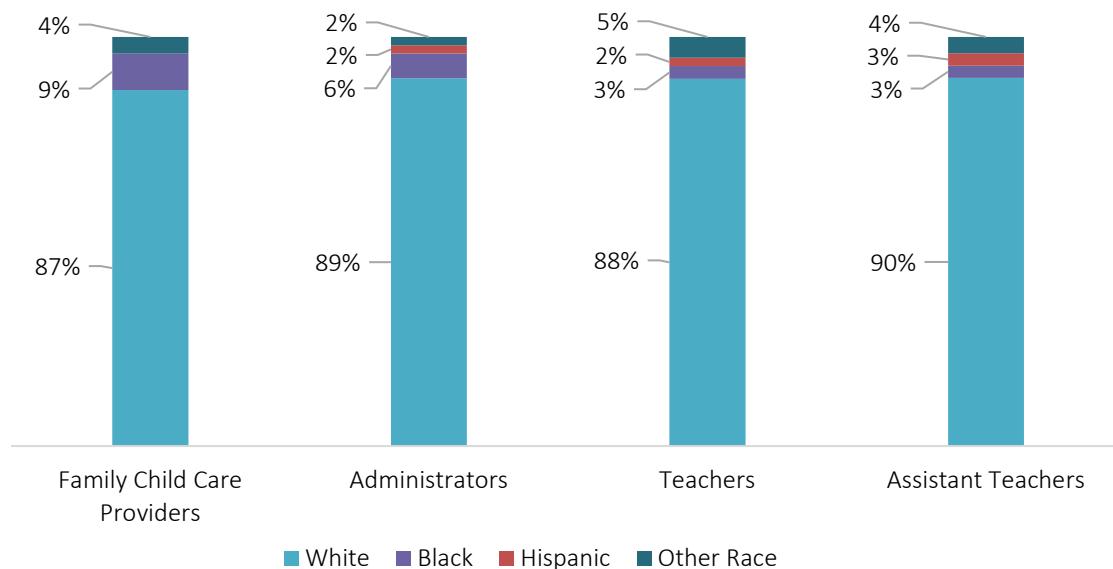
Exhibit 2.2. Average Years of Experience in Current Position and in the Field by Job Role



What is the racial/ethnic composition of the sample?

Early educators were asked to self-identify their race and ethnicity. Due to the small sample size, we combined early educators who identified as American Indian or Alaska Native, Asian, Native Hawaiian or Pacific Islander, and multiple race/ethnicities into a single category. The racial/ethnic composition of the sample by job role is shown in Exhibit 2.3. The majority of early educators (nearly 90% across job roles) identified as white. Black and African American early educators comprised 9% of the FCC provider sample, 6% of administrators, and 5% or less of teachers and assistant teachers. Early educators who identify as Hispanic were a small percentage of the sample, with no FCC providers and between 2–3% across job roles in community and public programs. Across job roles, 5% or less identified as another race.

Exhibit 2.3. Racial/Ethnic Distribution of Early Educators



We conducted additional analysis to determine whether race/ethnicity is related to job role, but we did not find any significant differences. The racial/ethnic distribution of early educators is similar across job roles, with the majority of early educators identifying as white. In addition, we examined whether the racial/ethnic distribution of teachers differed by ECE service sector. Results suggest that the racial and ethnic distribution of teachers in community-based programs is similar to the distribution in publicly funded programs.

What languages do early educators speak and to what extent do they match the languages spoken by children in their programs?

Only 8% of early educators reported speaking a language other than English (i.e., in addition to English). The most commonly spoken languages, other than English, were Spanish (5%), American Sign Language (3%), Arabic (1%), and French (1%). Approximately 10% of teachers in community and public programs and 7% of FCC providers report working with children whose primary language was not spoken by any staff in their programs. Spanish is the most common language spoken by children that is not spoken by any staff (28%), followed by Arabic (19%) and Chinese (12%).

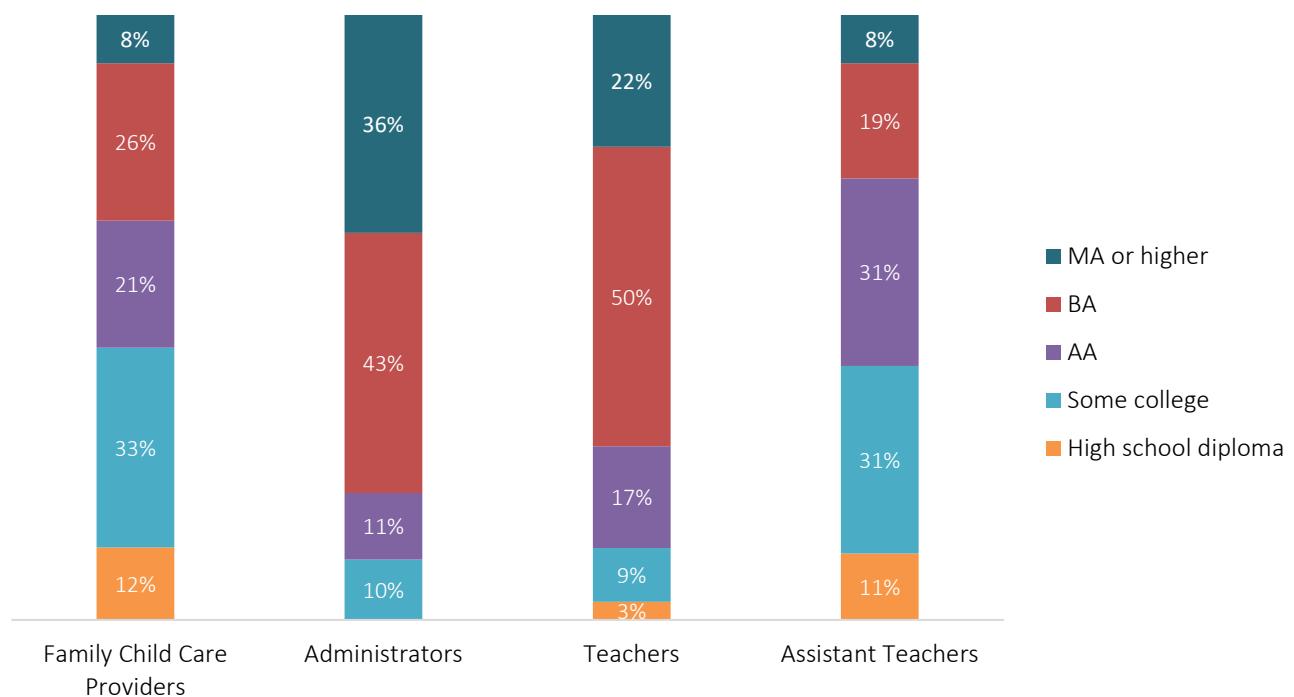
What are the educational attainment and credentials of the sample?

The distribution of educational attainment for the sample by job role is displayed in Exhibit 2.4.

The exhibit shows that approximately 55% of FCC providers, 90% of administrators, 89% of teachers, and 58% of assistant teachers hold at least an A.A. degree. FCC providers most frequently report “some college” as their highest level of attainment, whereas assistant teachers are evenly split between “some college” and an A.A. degree as their highest educational level.

When comparing educational attainment across job roles, administrators (79%) and teachers (72%) are significantly more likely than FCC providers (34%) and assistant teachers (27%) to hold at least a B.A. degree.

Exhibit 2.4. Educational Attainment by Job Role



Looking more closely at teachers, we did not find any differences in the educational levels of teachers who worked in community-based programs and teachers who worked in publicly funded programs. However, teachers who work with preschool-aged children are considerably more likely to report having at least a B.A. (79%) compared to teachers who work with infants/toddlers (53%). Despite the demonstrated importance of the early years, infant/toddler teachers have fewer education requirements than preschool teachers, and there is a limited focus on infant/toddler preparation in higher education (Austin, 2018).

Next, we examined the educational backgrounds of early educators in the sample who hold at least an A.A. degree. Exhibit 2.5 displays their field of study in their highest degree. As can be seen in the exhibit, 36% of FCC providers, 51% of administrators, 53% of teachers, and 48% of assistant teachers hold degrees in early childhood education, early childhood special education, or child development (which also includes degrees in human development and family relations). Education degrees were also common, with 19% of FCC providers, 24% of administrators, 31% of teachers, and 20% of assistant teachers holding degrees in elementary or secondary education. Many educators also held degrees in “other” fields, specifically 44% of FCC providers, 24% of administrators, 16% of teachers, and 32% of assistant teachers. Most commonly, these degrees were in business (9%), psychology (9%), social work (6%), and public/nonprofit administration (5%).

Exhibit 2.5. Distribution of Field of Degree among Early Educators

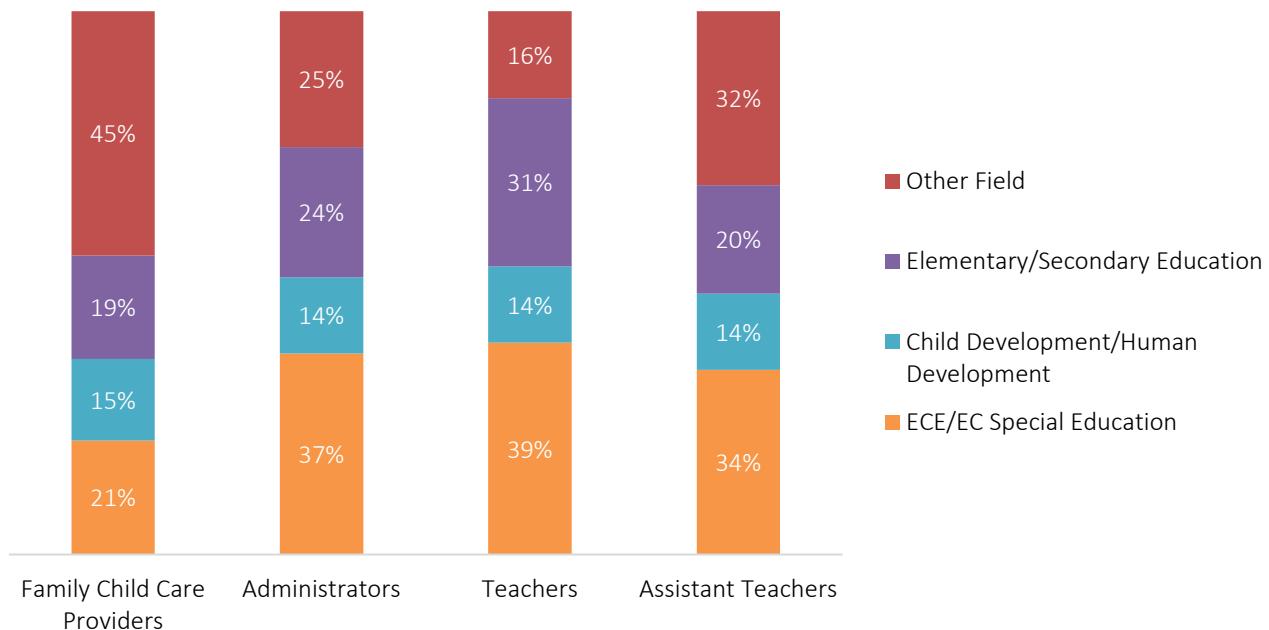
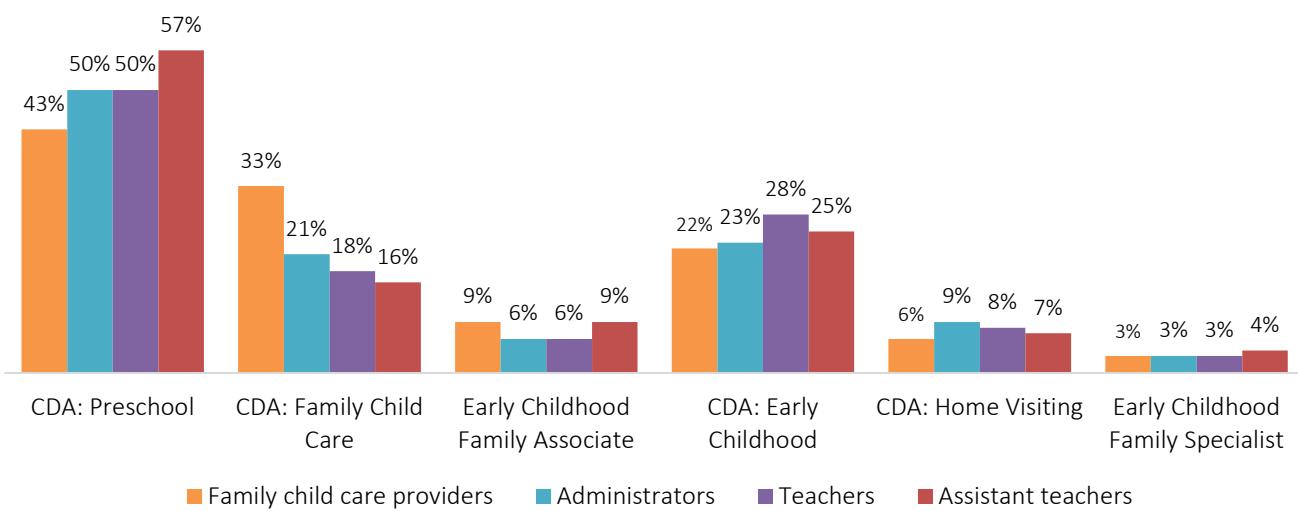


Exhibit 2.6 displays the specialized credentials earned by the sample. We observe that early educators in the sample are most likely to hold a Child Development Associate (CDA): Preschool Credential, with 43% of FCC providers, 50% of administrators and teachers, and 57% of assistant teachers holding a Preschool CDA.

Exhibit 2.6. Distribution of Credentials across Job Roles



Conclusion

The results of this chapter show that early educators in this sample have significant experience in the ECE field, but there is some degree of job instability among early educators working in community and public programs. In particular, there appears to be more occupational stability and tenure among FCC providers in Michigan compared to other job roles and to a national sample of FCC providers (NSECE, 2013). The results of this chapter also show a lack of racial and ethnic diversity among early educators in Michigan, at least within this sample. Close to 90% of the early educators in the sample identify themselves as white compared to 66% of the child population in Michigan (Annie E. Casey Foundation, Kids Count Data Center, 2018), suggesting a need for targeted recruitment of early educators of color into the field. Similarly, the results also suggest a need for targeted recruitment of early educators who can speak Spanish, Arabic, and Chinese.

The results of this chapter also show high levels of educational attainment across job roles. Compared to a national sample of ECE teachers, where the majority of teachers (53%) had some college as their highest level of education (NSECE, 2013), 72% of teachers in this sample report hold a B.A. degree or higher. Thus, the educational attainment of assistant teachers and FCC providers may be an important focal point for targeting professional development efforts.

Chapter 3



Professional Development Experiences and Needs

Professional development (PD) is designed to increase early educators' knowledge and competencies (IOM & NRC, 2015). Various topics are relevant in PD given the diverse needs of young children, the various responsibilities of early educators, and the constantly growing science on learning and development. As such, it is important to understand how prepared or confident early educators feel about various topics in order to identify areas to focus future PD efforts. Among other modalities, PD can be delivered through face-to-face workshops, online modules, or on-site coaching. This chapter seeks to understand early educators' feelings of preparation, the extent to which ECE workplaces support PD, and educators' preferences regarding PD opportunities and modalities.

In addition, early educators may engage in PD differently depending on the barriers they experience and/or the supports they receive. Barriers can include cost, distance to training locations, and time and are particularly important to consider among working professionals who may not have the time and resources to devote to ongoing PD. In contrast, supports may help alleviate barriers and can include scholarships, convenient locations, or convenient scheduling options. In this chapter, we seek to understand the barriers to PD that a sample of early educators in Michigan experience, as well as the supports that they need to participate in PD. This information can ultimately help inform Michigan's PD investments. Finally, we will explore the extent to which this sample is utilizing various opportunities and supports, including college/university coursework, the Michigan Early Childhood Registry (MiRegistry), and T.E.A.C.H. scholarships.

Research Questions

Based on a sample of early educators in Michigan, the purpose of this chapter is to address the following questions about PD:

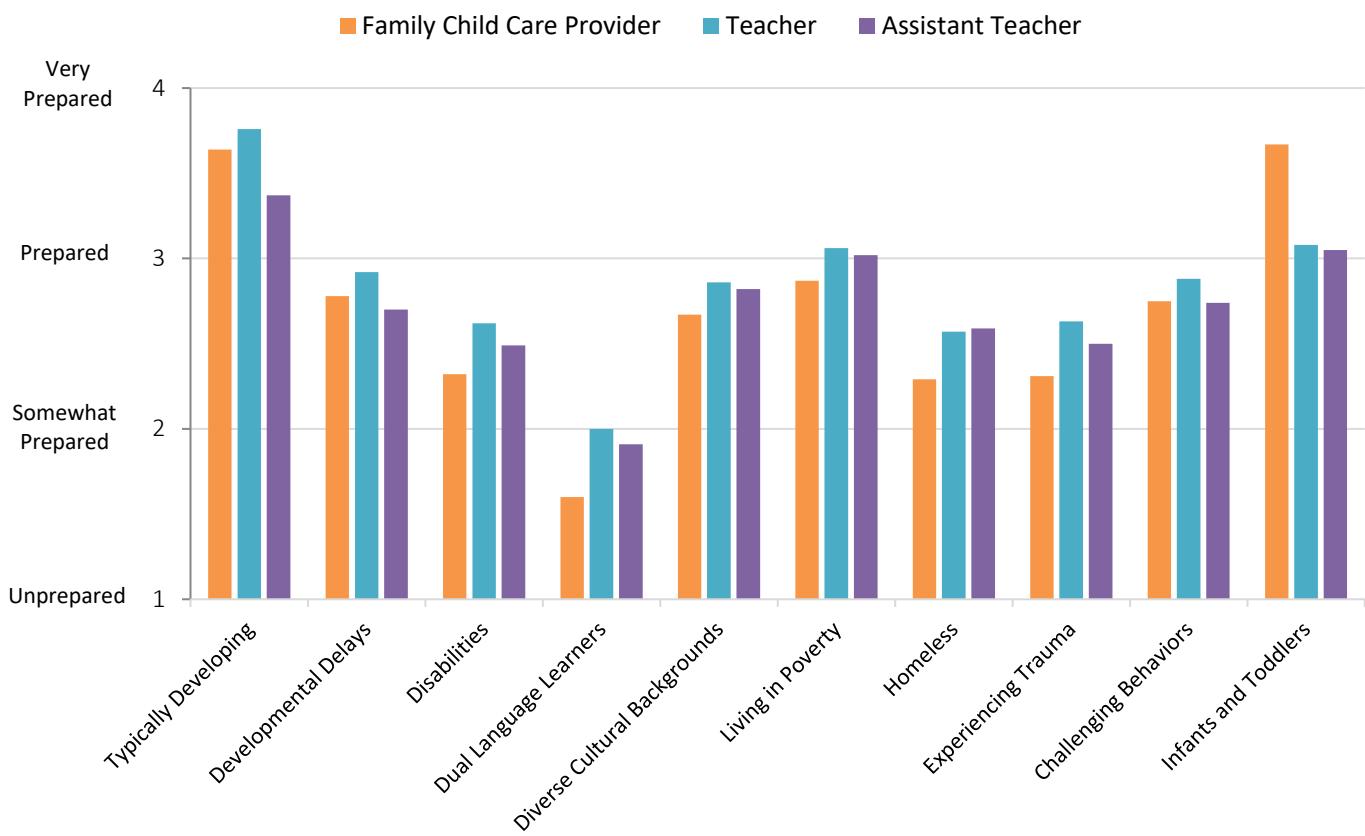
1. To what extent do early educators feel prepared for their job responsibilities?
 2. To what extent is PD supported in early educators' workplaces?
 3. What are early educators' PD modality preferences?
 4. What are the barriers and needed supports related to PD?
 5. What are the utilization rates for coursework, MiRegistry, and T.E.A.C.H. scholarships?
-

Results

To what extent do early educators feel prepared for their job responsibilities?

Working with Children. FCC providers, teachers, and assistant teachers were asked to rate how prepared they feel to work with different children, including typically developing children, children with special learning needs, culturally and linguistically diverse children, very young children (i.e., infants and toddlers), and children experiencing various stressors (homelessness, trauma, poverty, etc.). Preparedness was assessed on a four-point scale, where 1 represented “unprepared” and 4 represented “very prepared.” Exhibit 3.1 shows how prepared early educators feel to work with children by job role.

Exhibit 3.1. Feelings of Preparation for Working with Children by Job Role



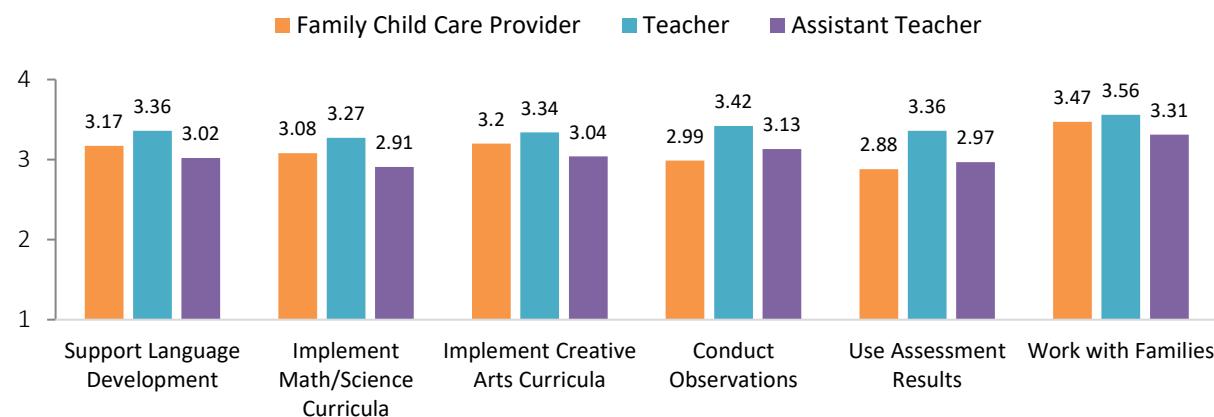
Across job roles, early educators feel most prepared to work with typically developing children and least prepared to work with dual language learners. Early educators also tend to feel prepared to work with infants and toddlers, especially FCC providers, who often work with children of various ages. In addition to dual language learners, early educators also tend to feel less prepared to work with children with disabilities, children experiencing trauma or toxic stress, and children experiencing homelessness.

Among teachers, these patterns were similar for both teachers in community-based programs and teachers in public programs. Patterns were also similar among infant/toddler teachers and preschool teachers, with one exception. On average, infant/toddler teachers feel “very prepared” ($M = 3.83$) to work with infants and toddlers, whereas preschool teachers feel “prepared” ($M = 2.92$).

Teaching Responsibilities. FCC providers, teachers, and assistant teachers were also asked to rate how prepared they feel to perform various tasks associated with teaching, including supporting language development, implementing math and science curricula, implementing creative arts curricula, conducting observations, using assessment results to plan curricula, and working with families. Again, preparedness was assessed on a four-point scale, where 1 represented

“unprepared” and 4 represented “very prepared.” Exhibit 3.2 shows how prepared early educators feel performing various responsibilities by job role.

Exhibit 3.2 Feelings of Preparation for Performing Teaching Responsibilities by Job Role



Overall, early educators feel “prepared” to perform these various responsibilities. Across job roles, early educators feel most prepared to work with families. FCC providers feel least prepared to use assessment results to plan their curricula, whereas teachers and assistant teachers feel least prepared to implement math and science curricula.

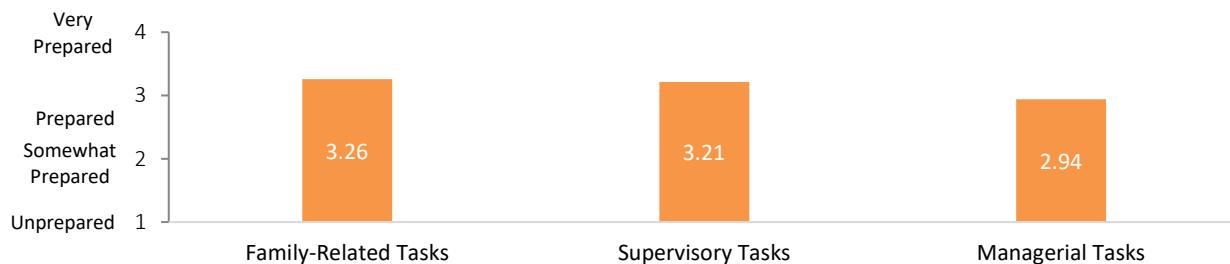
Administrative Responsibilities. Furthermore, administrators were asked to rate how prepared they feel to perform 15 different aspects of their jobs on a four-point scale, where 1 represents “unprepared” and 4 represents “very prepared.” To organize these items, factor analyses were used to create three distinct factors representing feelings of preparation related to: (1) supervisory tasks, (2) managerial tasks, and (3) family-related tasks. Specific items are shown in Exhibit 3.3.

Exhibit 3.3. Items by Factor for Administrative Responsibilities

FACTOR	ITEMS
Supervisory Tasks	Provide staff with feedback on their teaching practices Model best practices in language and literacy for teaching staff Model best practices in math and science for staff Model best practices for staff to support children's positive behavior Provide support to teachers in curricular planning Provide support to teachers in implementing and using child assessments for individualized support to children Develop effective classroom teaching teams Support staff in understanding the different programs being implemented in the center (e.g., Great Start Readiness Program, QRIS, Teaching Strategies Gold) Articulate the different program standards operating in the center (e.g., licensing, Head Start, etc.)
Managerial Tasks	Manage staff conflict Develop budgets and manage resources Manage turnover and staffing Hire and train new staff
Family-Related Tasks	Engage and support the families in your program Connect families with community resources

On average, administrators feel the most prepared to perform family-related tasks ($M = 3.26$; $SD = .60$), followed by supervisory tasks ($M = 3.21$; $SD = .55$). Administrators feel the least prepared to perform managerial tasks ($M = 2.94$; $SD = .67$), although it should be noted that all averages indicate administrators tend to feel "prepared" across job responsibility categories. Results are shown in Exhibit 3.4.

Exhibit 3.4. Administrators' Feelings of Preparation for Performing Various Tasks



To what extent is PD supported in early educators' workplaces?

Teachers and assistant teachers who work in community and public programs were also asked about the PD provided by or funded by their workplaces. Specifically, they were asked to rate six items that focused on the extent to which they feel PD is available through their organizations, is valued by their organization, and meets their needs. These six items were averaged to estimate overall satisfaction with the provided PD. Both teacher and assistant teacher responses ranged from 1 to 5, and on average, both job roles are “somewhat” satisfied with PD at their organization (teachers $M = 4.21$; $SD = .73$; assistant teachers $M = 4.18$; $SD = .93$).

What are early educators' PD modality preferences?

Preferred PD Modality. Given that PD can be delivered in various ways, including face-to-face, online, and on-site coaching, early educators were asked to identify their preferred modalities. Modality preferences by job roles are shown in Exhibit 3.5.

Exhibit 3.5. Modality Preferences for Professional Development by Job Role

PD Type	FCC Providers	Administrators	Teachers	Assistant Teachers
Face-to-face, group PD	64%	81%	77%	75%
Online PD	69%	57%	56%	56%
Mentoring or coaching	22%	36%	39%	48%

Note: Educators could select multiple modality preferences.

Face-to-face group professional development is the most preferred modality among administrators, teachers, and assistant teachers. Online PD is the most preferred modality among FCC providers. On-the-job mentoring or coaching is the least preferred modality across job roles. Preferences appear mostly consistent among teachers in community and public settings. Teachers in both settings prefer face-to-face, group PD (69% community; 80% public), followed by online PD (68% community; 52% public). On-the-job mentoring or coaching is the least preferred modality (31% community; 42% public).

Preferred Coursework Modality. In addition, early educators were asked to identify their preferred modalities for college/university classes (Exhibit 3.6).

Exhibit 3.6. Modality Preferences for Coursework by Job Role

Coursework Type	FCC Providers	Administrators	Teachers	Assistant Teachers
Face-to-face	36%	36%	39%	42%
Online	62%	66%	59%	54%
Hybrid	43%	44%	55%	46%

Note: Educators could select multiple modality preferences.

Unlike preferences for in-service PD where face-to-face modalities are preferred, online coursework is the most preferred modality for college/university classes, followed by hybrid models, which are partially taught online and partially taught face-to-face. Entirely face-to-face coursework is the least preferred modality across job roles. Among teachers, a few differences emerged by sector. Specifically, teachers in community settings have a strong preference for online coursework (75%), compared to 54% of teachers in public settings. Teachers in public settings most prefer hybrid courses (56%), which was endorsed by 52% of teachers in community settings. Only one in three teachers in public settings prefers face-to-face coursework (35%) compared to approximately half of teachers in community settings (53%).

What are the barriers and needed supports related to PD?

Barriers. Early educators were asked to identify barriers that prevent them from participating in in-service PD (i.e., trainings that are not for college credit). Thirteen possible barriers were identified, as well as the option to endorse “none of the above.” The three most common barriers are highlighted for each job role in Exhibit 3.7.

FCC providers tend to identify the most barriers to PD, with only 16% identifying “none of the above” (compared to 28–36% in other job roles). Approximately half of FCC providers identify lack of substitute time and having to take an unpaid workday / vacation day as barriers to participating in PD. The third most common barrier among FCC providers is the cost of PD. Administrators most commonly identify lack of substitute time and that PD tends to be too basic as barriers to their participation in PD. Common among teachers and assistant teachers is, again, lack of substitute time and the cost of PD. Among teachers, those teaching in public settings are significantly more likely to identify lack of substitute time as a barrier (31%) compared to teachers in community settings (9%). No other barriers are significantly different by sector.

Exhibit 3.7. Barriers to Professional Development by Job Role

Barrier	FCC Providers	Administrators	Teachers	Assistant Teachers
PD too expensive	31%	21%	25%	27%
Have to take an unpaid workday	46%	15%	16%	20%
No substitute coverage	49%	30%	26%	18%
Inconvenient times	23%	23%	14%	13%
PD too basic	21%	26%	24%	13%
PD too advanced	1%	0%	0%	3%
PD not relevant for my children	8%	6%	9%	2%
PD is not relevant to my job	4%	10%	6%	4%
PD is too far away	21%	15%	13%	14%
Not enough online sessions	21%	17%	16%	13%
Not enough face-to-face sessions	7%	8%	3%	11%
Don't know where to find PD	10%	10%	11%	13%
Prefer to take college classes	9%	9%	12%	14%
None of the above	16%	28%	29%	36%

Note: Educators were asked to select all that apply.

Supports. Early educators were also asked about their desires to pursue higher education and the supports that would enable them to pursue a degree. Across job roles, 73% of FCC providers, 71% of administrators, 76% of teachers, and 67% of assistant teachers expressed an interest in higher education. Exhibit 3.8 shows the supports, by job role, that these early educators identified to be able to successfully pursue higher education. The three most common barriers are highlighted for each job role.

By far, the most common needed support identified across job roles is tuition support, such as scholarships and fellowships, to offset the cost of higher education. “More online class options” is also identified as one of the top three desired supports across all job roles. Other commonly desired supports include better financial advisement and more convenient class times. Among teachers, those teaching in community settings are significantly more likely to identify the need for better financial advisement (39%) compared to teachers in public settings (16%). No other supports are significantly different by sector.

Exhibit 3.8. Supports Needed for Professional Development by Job Role

Support	FCC Providers	Administrators	Teachers	Assistant Teachers
Tuition support	60%	63%	65%	54%
Better financial advisement	24%	14%	22%	23%
Convenient class times	24%	17%	21%	33%
More online class options	34%	33%	35%	25%
More face-to-face options	7%	4%	3%	9%
More convenient locations	11%	11%	13%	11%
Academic support	4%	0%	3%	8%
Better advisement	4%	4%	3%	6%
Course transfers	11%	12%	10%	16%
Career counseling	4%	3%	6%	6%
Practice-based mentoring	3%	1%	5%	6%
Work release time	5%	5%	7%	4%
Child care	7%	7%	9%	9%
Cohort learning	6%	12%	6%	10%

Note: Educators were asked to select all that apply.

What are the utilization rates for coursework, MiRegistry, and T.E.A.C.H. scholarships?

Coursework. Early educators were asked if they are currently enrolled in a degree or certificate program at a college or university. Just over a quarter (28%) of assistant teachers indicate they are currently enrolled, followed by 17% of teachers, 13% of administrators, and 11% of FCC providers. Among teachers, enrollment did not differ by sector (17% for teachers working in both community and public settings).

Michigan's Early Childhood Registry. MiRegistry allows early educators to create profiles to track employment, education, and training history; plan their PD; and find relevant training opportunities in the state (MIRegistry, 2018). Approximately half of teachers (48%) and assistant teachers (53%), two thirds of FCC providers (66%), and 70% of administrators are aware of the registry. Among all early educators who are aware of the registry, 55% report they had received

support from leadership in their organization for uploading and maintaining professional registry information.

T.E.A.C.H. Scholarships. T.E.A.C.H. Early Childhood® MICHIGAN is a scholarship program for early educators who meet certain eligibility criteria and work in Michigan. It provides financial assistance and paid release time so that early educators can continue working while receiving training and/or obtaining degrees. Although eligibility criteria depends on the degree/training that is sought, all scholarships require early educators work at least 20 hours per week and meet certain income requirements (e.g., making less than \$17/hour). In addition, many scholarships require sponsorship by current employers, and employers agree to pay a portion of tuition and fees. More information about the program can be found on the Michigan Association for the Education of Young Children's website (MIAEYC, n.d.).

On the survey, early educators were asked whether or not T.E.A.C.H. scholarships are currently offered at their job. Just under half (41%) of administrators said these scholarships are available to them, followed by 26% of teachers, 18% of assistant teachers, and 15% of FCC providers. Among teachers, availability rates are similar for those working in community (30%) and publicly funded (25%) ECE settings.

Conclusion

The results of this survey provide valuable insight into early educators' feelings of preparedness, PD preferences, barriers, and desired and utilized supports. In terms of preparedness, educators tend to feel prepared to work with children and perform various teaching and administrative responsibilities. However, it is important to note that early educators feel least prepared to work with dual language learners. A recent estimate suggests that approximately 15% of young children (age 0 to 8) are dual language learners in the state of Michigan (Park, O'Toole, Katsiaficas, 2017). In order for all children to receive the highest quality early experiences, educators need to feel well-prepared to work with children who speak various languages. Topics related to working with dual language learners are important areas to focus future PD efforts. In light of recent research suggesting that many higher education faculty do not currently possess the expertise in dual language learning to effectively support the preparation of early educators, this topic must be addressed within higher education as well as in ECE settings (Copeman Petig, Austin, & Dean, 2018).

In terms of modality preferences, face-to-face group PD and online PD were most preferred. For college/university coursework, online courses were most preferred. Face-to-face group PD may allow networking, connection, and collaboration, while online PD/coursework may allow more flexibility in when and where learning occurs. Although on-site mentoring or coaching was the least preferred modality, 22–48% of educators, depending on job role, were still receptive to this delivery method. In designing future PD efforts, early educators' preferences should be considered in conjunction with evidence that ongoing exposure to material and repeated

practice of skills are most effective at improving instructional practices (Zaslow, Tout, Halle, Whittaker, & Lavelle, 2010).

The most commonly identified PD barriers tend to be logistical and/or financial, including lack of substitute coverage, lack of paid time off for training, and the associated expense. FCC providers, in particular, identified the most barriers of any job role, suggesting they need greater support in accessing PD. Relatedly, at least half of all early educators across job roles identified a need for greater financial support for PD. Given that only one in four teachers and fewer than two in five assistant teachers and FCC providers report access to T.E.A.C.H. Early Childhood® scholarships, financial advisement, information sharing, and marketing may be a valuable strategy for increasing access to existing scholarships. Other supports that educators feel would be valuable include more convenient class times and online class options, which may allow educators to fit helpful PD into their busy schedules.



Chapter 4

Compensation and Financial Well-Being

Despite the importance of early educators in promoting children's development, many early educators earn exceedingly low wages, sometimes at or near the federal poverty level, lack access to workplace benefits, and often struggle to meet the needs of their own families (Whitebook et al., 2014). Low wages do not only constrain an early educator's ability to deliver high-quality services to young children (Phillips, Mekos, Scarr, McCartney, & Abbott-Shim, 2000), but also contribute to an annual early educator turnover rate of 15–30% and persistent difficulties attracting and retaining professionals in the field (Phillips et al., 2000). Several studies have also found that the strongest predictor of classroom quality is the wages earned by teachers, which also predict the likelihood that they will stay in their jobs (Schaack & Le, 2017d). Thus, the purpose of this chapter is to explore the compensation and economic well-being of a sample of early educators in Michigan so that policy makers can better target workforce initiatives aimed at improving the financial status of the workforce.

Research Questions

Specifically, this chapter will address the following research questions:

1. What are the hourly wages earned by a sample of early educators in Michigan?
2. What benefits do they receive?
3. To what extent is the sample economically fragile?

Results

What are the hourly wages of a sample of early educators in Michigan?

Exhibit 4.1 shows the descriptive statistics for hourly wages among early educators in various job roles, sectors, and age groups. As is typical, we report median wages.²

Exhibit 4.1. Descriptive Statistics for Hourly Wages by Job Role, Setting, and Age Group

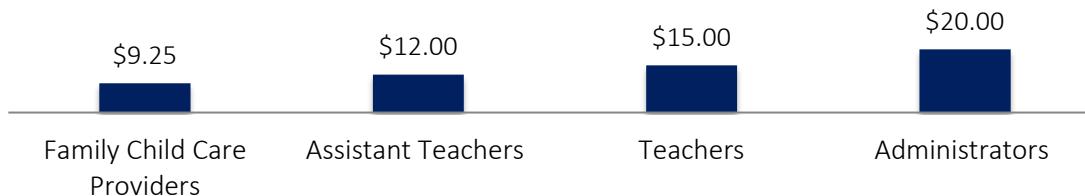
Job Role	Median (SD)	Range
FCC Provider	\$9.25 (\$4.24)	\$9.25–\$33
Assistant Teacher	\$12.00 (\$2.22)	\$9.25–\$20
Teacher	\$15.00 (\$6.37)	\$9.25–\$33
Community-Based	\$13.50 (\$3.31)	\$9.25–\$22
Publicly Funded	\$15.50 (\$4.84)	\$9.25–\$33
Preschool	\$15.50 (\$4.60)	\$9.25–\$33
Infant/Toddler	\$14.90 (\$4.41)	\$9.25–\$33
Administrators	\$20.00 (\$4.61)	\$9.25–\$33

As shown in Exhibit 4.2, FCC providers earned the lowest wages compared to all other job roles.³ Specifically, FCC providers earn \$9.25, which is the same as the state's minimum wage. Assistant teachers earned slightly more (\$12), followed by teachers (\$15) and administrators (\$20). With respect to staff in community and public programs, there appears to be a career ladder linked to increased wages within the profession. Teachers earn an average of \$7,155 more annually than assistant teachers; administrators earn an average of \$8,902 more annually than teachers.

² Mean hourly wages were observed to be similar to median wages for the sample. Average hourly wages for FCC providers are \$11.31 an hour, for assistant teachers are \$12.08 an hour, for teachers are \$15.52 an hour, and for administrators are \$19.80 an hour.

³ It is unclear from the reporting of FCC providers whether they considered their business expenses in their hourly wage, which may account for the wide variation in their hourly wages. A more detailed account of FCC providers' expenses may be needed to more accurately reflect their income.

Exhibit 4.2. Median Hourly Wages by Job Role



The large standard deviation in teachers' hourly wages (Exhibit 4.1) suggests considerable variability, likely due to differences by setting. Specifically, Exhibit 4.3 displays the median hourly wages for teachers who work in public programs and for teachers who work in community-based programs on the left side of the figure. Teachers who work in public programs earn a median wage of \$15.50 an hour, whereas teachers in community-based programs earn a median wage of \$13.50, a statistically significant difference. As noted in Chapter 2, there were no statistically significant educational differences among these teachers.

The right side of Exhibit 4.3 combines teachers across the two service sectors and displays the median hourly wages for preschool and infant/toddler teachers. Preschool teachers report a median hourly wage of \$15.50 and infant/toddler teachers report an average hourly wage of \$14.90. Differences in hourly wages between preschool teachers and infant/toddler teachers are not statistically significant.

Exhibit 4.3. Teacher Median Hourly Wage by Program Type and Age Group Served



Exhibit 4.4 displays the descriptive statistics for wages among teachers across settings by education level. Due to small sample sizes, teachers with a high school diploma as their highest education level and teachers who have taken some college classes, but have not yet earned a degree, were combined. Teachers with a high school degree / some college earn significantly less than those with an A.A. degree or higher (\$11.50 and \$13.50, respectively). Teachers with a B.A. degree earn approximately \$16.25 an hour, and teachers with a graduate degree earn approximately \$15.50 an hour. There were no statistically significant differences among the wages of teachers with A.A., B.A., and graduate degrees. The large standard deviation for teachers who have a master's degree reflects the wide range (\$9.25–\$33) and the relatively large portion of educators (8%) who report the highest wage (\$33).

Exhibit 4.4. Descriptive Statistics for Wages by Educational Attainment among Teachers

Educational Attainment	Median (SD)	Range
High School Diploma / Some College	\$11.50 (\$2.13)	\$9.25–\$22.91
Associate's Degree	\$13.50 (\$2.74)	\$9.60–\$23.39
Bachelor's Degree	\$16.25 (\$3.73)	\$9.25–\$29
Master's Degree	\$15.50 (\$6.51)	\$9.25–\$33

To account for cost of living, we examine the extent to which early educators, within each county, have hourly wages that are sufficient to support one adult, or one adult and one child, under the assumption that the early educator is the sole monetary provider.⁴ Across counties, the average hourly wage needed to support one adult was \$10.53 and the average hourly wage needed to support one adult and one child was \$22.29. Exhibit 4.5 provides the percent of early educators whose hourly wage meets the threshold for a living wage by job role, service sector, and age group served. With the exception of FCC providers, the majority of educators report hourly wages that could support one adult. A little less than one in four FCC providers report wages that can support one adult, whereas more than 90% of administrators report wages that could support one adult. Examining the percentage of early educators whose wages can support one adult and one child, we observe that the vast majority cannot do so on their wages alone. Nearly one third of administrators report being able to do so, compared to less than 6% of educators in other roles. Overall, the hourly wages reported by the early educators in our sample are generally sufficient to support a single adult, but are mostly insufficient to support a family of one adult and one child (or more).

Exhibit 4.5. Percent of Early Educators Meeting the Threshold for a Living Wage by Job Role, Setting, and Age Group Served

	1 Adult	1 Adult, 1 Child
FCC Provider	23%	5%
Assistant Teacher	65%	0%
Teacher	84%	5%
Community-Based	79%	0%
Publicly-Funded	86%	6%
Preschool	86%	5%
Infant/Toddler	84%	3%
Administrator	91%	35%

⁴ The living wage calculator used for this analysis is found at <http://livingwage.mit.edu/states/26/locations>.

What benefits do they receive?

To understand the extent to which early educators have access to workplace benefits, early educators who work in community and public programs were asked to identify the benefits they are offered through their employers. FCC providers were asked to identify the types of benefits that they either purchase or receive through their partner or spouse. For the purpose of this analysis, we combined job roles within sectors since workplace benefits are often provided at an organizational level. Exhibit 4.6 displays the results. The three most commonly received benefits, by service sector, are highlighted in the table.

Exhibit 4.6 Benefits Received by Service Sector

	Overall Sample	FCC Provider	Community	Public
Health insurance	54%	46%	45%	68%
Dental insurance	45%	35%	38%	62%
Short-term disability insurance	22%	8%	28%	38%
Long-term disability insurance	18%	5%	21%	33%
Vision insurance	38%	27%	30%	57%
A retirement plan	29%	12%	29%	53%
Two weeks of paid time off	35%	17%	52%	52%
At least five paid holidays	51%	40%	65%	60%
Paid professional development	42%	14%	60%	72%
Tuition support	16%	5%	25%	26%
Reduced-rate / free child care	18%	9%	41%	20%
Flexible spending account	13%	5%	13%	23%
I do not receive any benefits	18%	28%	11%	8%

More than half of early educators who work in publicly funded and community-based programs are receiving two weeks paid time off, at least five paid holidays, and paid professional development. Early educators working in publicly funded programs are also likely to receive health, dental, vision insurance, and a retirement plan. However, less than half of all community-based early educators and FCC providers receive health, dental, and vision insurance, and 88% of FCC providers and 71% of community-based early educators do not have a retirement savings account to which they or their employer contribute. In total, 18% of early educators across sectors do not receive any benefits, including 28% of FCC providers, 11% of community-based early educators, and 8% of early educators working in public programs.

We also compared whether early educators working in different service sectors are more or less likely to receive particular benefits. Results suggest that community-based early educators are more likely to receive short-term and long-term disability, have a retirement plan, receive five paid holidays, and receive tuition support than are FCC providers. Early educators working in

public programs are also more likely to receive health insurance, long-term disability, vision insurance, and paid professional development than are community-based teachers. Community-based early educators are also more likely to receive free or reduced-rate child care than early educators working in public programs.

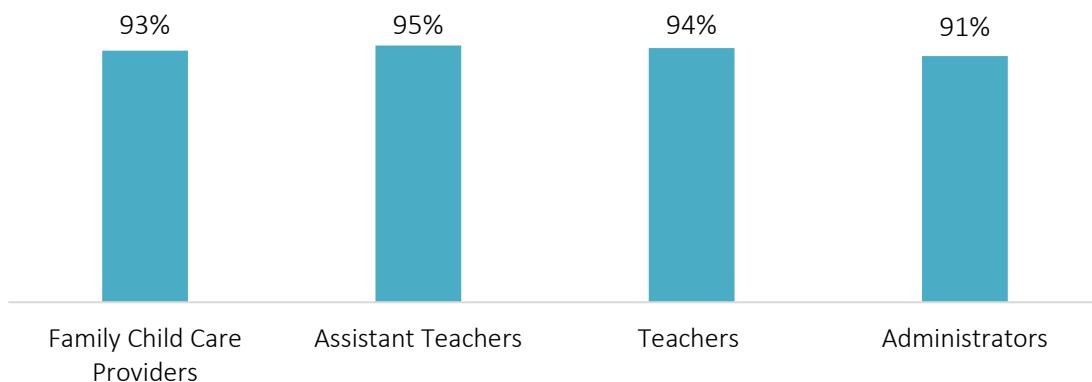
To what extent is the sample economically fragile?

We first examined what percentage of educators in the sample receive at least one public subsidy reserved for low-income individuals and families, including:

- › Medicaid / MI Child Health Insurance (MIChild)
- › The Supplemental Nutrition Assistance Program (SNAP)
- › Woman, Infants, and Children (WIC) Nutrition Program
- › Free or Reduced-Price Lunches
- › Section 8 Housing Vouchers or Public Housing
- › Child Development and Care (CDC) Subsidies
- › Temporary Assistance for Needy Families (TANF)
- › Low-Income Energy Assistance (RH Tennyson_LIHEAP)
- › The Earned Income Tax Credit

Overall, 93% of the total sample received at least one subsidy. Exhibit 4.7 displays the results by job role.

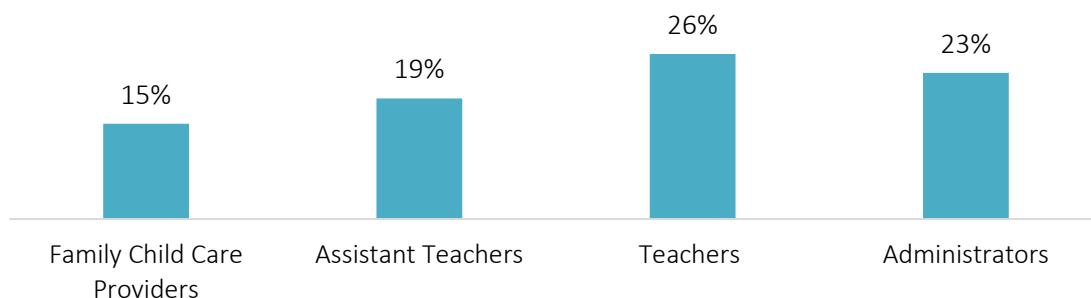
Exhibit 4.7. Percent of Early Educators Receiving Public Subsidies by Job Role



The figure shows that a high percentage of early educators across job roles (91–95%) participate in at least one public assistance program. The most commonly utilized public subsidies include MIChild (46%), Medicaid/Medicare (42%), the Earned Income Tax Credit (40%), free and reduced

school lunches (30%), and WIC or SNAP (26%). Among educators receiving more than one subsidy, 33% receive two subsidies, 20% receive three subsidies, and 10% receive four or more subsidies. Next, we examined what percentage of educators in the sample hold a second job. Overall, 20% of the total sample held second jobs. Exhibit 4.8 shows the results by job role. Between 15% and 26% of early educators hold a second job across job roles. When examining differences by job roles, FCC providers are less likely to have a second job than teachers.

Exhibit 4.8. Percent of Early Educators Holding Second Jobs by Job Role



Next, we examined the financial strain experienced by the sample of early educators. Early educators were asked to respond to a set of three questions drawn from the *Financial Strain Scale* (Conger & Elder, 1994). The first question asked about how much money they have left over at the end of each month. For this item, a score of 1 reflects “not enough money” left to make ends meet, a score of 2 reflects “just enough money,” a score of 3 reflects “some money left over” after paying bills, and a score of 4 reflects “more than enough money left over.” The second item asked early educators how difficult it has been for them to pay their bills over the last 12 months. A score of 1 reflects “great difficulty,” a score of 2 reflects that they have had “quite a bit of difficulty,” a score of 3 reflects that they have had “some difficulty,” and a score of 4 reflects that they have had “no difficulty.”

Exhibit 4.9 displays the means (and standard deviations) for the sample by job role. The table shows that, on average, across job roles, most early educators make just enough money to pay their bills with little money left over at the end of each month. Across the sample, 19% report not having enough money left at the end of each month to make ends meet. The table also shows that most early educators, across job roles, and particularly assistant teachers, have some difficulty paying their bills. Across the sample, 18% percent report quite a bit of difficulty paying their bills.

Exhibit 4.9. Descriptive Statistics for Financial Strain Scale by Job Role

	FCC Providers	Administrators	Teachers	Assistant Teachers
Money left at end of month	2.28 (0.80)	2.46 (0.88)	2.18 (0.89)	2.05 (0.94)

Difficulty paying bills	3.21 (0.80)	3.28 (0.78)	3.01 (0.93)	2.83 (0.98)
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Note: Lower scores indicate greater financial strain

Early educators were also asked to identify the financial sacrifices they have made in the past year to make ends meet. Exhibit 4.10 displays the percentage of early educators across the sample that have made particular sacrifices. Important to note, 52% have used savings to meet basic expenses, while 42% used credit to make ends meet. In addition, about one in three educators had to postpone medical or dental care because of a lack of funds, one in four have fallen behind in bills, and one in five have borrowed money to meet their basic needs.

Exhibit 4.10. Financial Sacrifices

	Percent
Cut back on social activities and entertainment expenses.	63%
Changed food shopping or eating habits to save money.	55%
Used savings to meet daily living expenses.	52%
Postponed major household purchase(s).	48%
Purchased more items on credit than you used to.	42%
Postponed medical/dental care.	33%
Fallen behind in paying bills.	27%
Reduced household utility use.	26%
Reduced other charitable contributions.	26%
Reduced driving the car to save money.	24%
Borrowed money to help pay bills.	20%
Sold possessions or cashed in life insurance.	18%
Postponed or delayed paying property tax.	6%
Reduced or let life insurance lapse.	4%
Reduced or eliminated medical insurance.	5%
Reduced or eliminated auto or household insurance.	5%
Sold property to raise money.	4%

Conclusion

The results of this chapter demonstrate the economic fragility of Michigan's early educator workforce. Regional cost of living analyses reveal that most educator wages are insufficient to support one adult and one child. Almost all of the early educators in this sample make low enough wages that they or their children receive public subsidies restricted to low-income individuals or families, suggesting that government programs are subsidizing the ECE workforce. Approximately one in five educators are struggling to pay their bills and make ends meet. The low percentages of early educators in community-based ECE programs and of FCC providers who received comprehensive benefits also show how difficult it is to make a career in ECE. Importantly, the stress that early educators may feel as a result of such economic strain can have

implications for young children, as it can be very challenging to provide positive and responsive care in the face of chronic economic stress (Dearing, McCartney, & Taylor, 2001).

The results of this chapter also show little practical variation among teachers' hourly wages as a function of their education levels, tenure in their organizations, and experience as an early educator, creating little incentive for teachers to pursue educational advancement and making it difficult to retain a highly qualified workforce in many communities throughout Michigan. In the immediate future, major public investments are needed to increase the compensation of early educators in Michigan, who are so very vital to working families and their children.



Chapter 5

Working Conditions, Turnover, and Burnout

Working conditions, such as planning time, paid professional development, physical resources, and manageable class sizes, can promote effective teaching (Torquati, Raikes, & Huddleston-Casas, 2007; Whitebook, McLean, & Austin, 2016). However, unsupportive working conditions, including stressful situations, difficult relationships, and not feeling fairly compensated, may incite turnover (Cassidy, Lower, Kintner-Duffy, Hedge, & Shim, 2011; Jeon & Wells, 2018).

Turnover and burnout among the ECE workforce are a major cause for concern. Early educators who experience burnout feel emotionally exhausted, detached from their jobs, and lack a sense of personal accomplishment at work (Maslach, Schaufeli, & Leiter, 2001). Past studies have documented average early childhood teacher turnover at rates of 15–30% annually, depending on the setting (Rhodes & Huston, 2012). Turnover tends to be even higher among assistant teachers, with some estimates as high as 36% (Roberts, Gallagher, Sarver & Daro, 2018; Schaack & Le, 2017d). Turnover can be disruptive to children, as well as staff, who have formed strong relationships and routines (Whitebook & Sakai, 2003), and it can be time consuming and costly to programs as administrators must hire and train new staff (Hale-Jinks, Knopf, & Kemple, 2006).

This chapter explores working conditions, as well as turnover and burnout, among the sample of early educators in Michigan. Aside from reporting the working conditions experienced by early educators, we report educators' perceptions of the quality of work environments, as well as job motivations and frustrations. To inform workforce retention efforts, this chapter also explores the working conditions educators identify as critical for keeping them in their jobs. We also report the extent to which early educators experience burnout, as well as intentions to leave their jobs in the next two years. Finally, we examine turnover rates among early educators in various job roles, and the time it usually takes to fill staff vacancies when turnover occurs.

Research Questions

The purpose of this chapter is to address the following questions among a sample of early educators in Michigan:

1. What types of working conditions do early educators experience?
2. What are their most common job motivators and frustrations?
3. To what extent do early educators in the sample experience burnout and intend to leave their jobs?
4. What are the annual turnover rates and how long does it take to fill vacancies?
5. What factors do early educators identify as important for retaining them in their jobs?

Results

What types of working conditions do early educators experience?

Working conditions were measured in two ways: job supports and perceived quality of the work environment. Regarding job supports, teachers and assistant teachers identified supports in their work settings from a list of 13 options. These supports are categorized into four areas: (1) written job expectations; (2) performance and wage review processes; (3) paid planning and professional development; and (4) self-care. Results are displayed in Exhibit 5.1.

Teachers and assistant teachers commonly report having written job expectations, including employee handbooks and job descriptions, annual performance evaluations, and orientation for new staff, as well as paid time for planning, PD, and staff meetings. Teachers in public settings were significantly more likely to receive paid PD (58%) than teachers in community settings (30%). In terms of supports for self-care, more than half of the teachers and assistant teachers had access to a staff lounge. Notably, less than one in three teachers and assistant teachers report receiving paid lunches and paid breaks, and only 17% report annual cost-of-living wage increases.

Exhibit 5.1. Job Supports Available to Teachers and Assistant Teachers

Construct	Items	Percent
Written job expectations	Written personnel policies / employee handbook	76%
	Written job descriptions	71%
	Written hiring contracts	47%
Performance and wage review processes	Annual performance evaluations	73%
	A formal grievance process	43%
	Yearly cost-of-living wage adjustments	17%
Paid planning and professional development	Orientation for new staff	62%
	At least one hour of paid planning time a week	61%
	Paid release time for required training/professional development	53%
Self-care	Paid attendance for staff meetings outside of work hours	50%
	A staff lounge	61%
	Paid lunch breaks for employees working six hours or more	28%
	Fifteen-minute breaks for every four hours worked	23%

The second measure of working conditions captured early educators' perceptions of the quality of their work environment. Teachers and assistant teachers responded to a series of 12 items rated on a 1–5 scale, with 1 meaning "strongly disagree" and 5 meaning "strongly agree." The 12 items were subjected to a factor analysis that identified two underlying constructs: communicative-supportive and bureaucratic-unrest. Communicative-supportive is characterized by formal and informal communication and professional support among staff and administrators. Bureaucratic-unrest is characterized by a strong regulatory and hierarchical culture, paperwork requirements, staff conflict, confusion, and dissatisfaction. Specific items on the scale are found in Exhibit 5.2.

Exhibit 5.2. Perceptions of Work Environment Items

Scale	Items
Communicative-Support	<ul style="list-style-type: none"> – My relationships with the other teachers in my program are positive and collegial. – We have strong communication among the teachers in my classroom. – Leadership in my program helps me to be effective in my teaching. – There is strong communication between program leadership and teachers. – Decisions about my job are made in a fair manner. – Teachers feel comfortable sharing their challenges with supervisors and program leaders.
Bureaucratic-Unrest	<ul style="list-style-type: none"> – My time is spent more on paperwork (assessments, preparing for inspections, etc.) than on being with children. – Too many rules and regulations interfere with how well I am able to do my job. – Program leaders rarely involve teachers in decision-making about the direction of the program. – The morale among teachers in my center is low. – It is often not clear who has the authority to make decisions regarding my job. – In my program, we have a lot of conflicts with one another.

Exhibit 5.3 shows the mean scores for teachers and assistant teachers for “communicative-support” and “bureaucratic-unrest.” Higher scores on the communicative-support scale indicate more positive work environments, whereas higher scores on the bureaucratic-unrest suggest more negative work environments.

Exhibit 5.3. Perceptions of Work Environments



Results suggest that, on average, both teachers and assistant teachers have largely positive perceptions of their work environments. Mean scores for the communicative-support scale are

3.83 and 3.89, respectively, indicating both groups tend to “agree” there is strong formal and informal communication and professional support in place in their workplaces. Likewise, mean scores for the bureaucratic-unrest scale are 2.72 and 2.56, respectively, indicating that both groups tend *not* to see their work environments as being overly hierarchical, regulatory, and conflictual. There were no statistically significant differences by job role or sector.

What are their most common job motivators and frustrations?

Motivators. Early educators were asked to identify, from a set of 18 response options, the three primary factors that motivate them to stay in their jobs. Exhibit 5.4 displays the percent of educators who endorsed each option, with the three most frequently nominated factors highlighted for each job role.

Exhibit 5.4. Job Motivations

	FCC Providers	Administrators	Teachers	Assistant Teachers
Relationships with children	71%	64%	83%	92%
Relationships with families	41%	47%	51%	53%
I feel like I am making a difference	40%	47%	41%	36%
I am good at what I do	27%	28%	25%	20%
Relationships with other staff	6%	25%	23%	34%
The work schedule	7%	14%	20%	26%
The benefits	2%	8%	11%	3%
The pay	7%	8%	6%	3%
I don't like change	2%	3%	6%	3%
Career advancement opportunities	1%	5%	5%	2%
PD opportunities	2%	1%	5%	2%
Autonomy and independence	5%	14%	4%	5%
To develop and support teachers	1%	15%	4%	3%
Free or reduced-rate child care	2%	1%	3%	4%
I own the business / work for myself	49%	9%	2%	5%
I can't find another job	1%	2%	2%	0%
Ability to stay home	32%	2%	1%	2%
Tuition support	1%	0%	0%	0%

Across job roles, the most commonly reported reason that early educators stay in their jobs is the relationships they have with children (64–92% across job roles). Other commonly endorsed reasons include the relationships with families and feeling like they are making a difference. Similarly, approximately one in four teachers and assistant teachers and one in three administrators note that their relationships with other staff is a key reason for staying in their job. It is also worth noting that many educators are also motivated by feelings of self-efficacy,

with 20–28% of educators indicating that being good at what they do contributes to why they stay. Several motivators are unique to FCC providers; approximately half of FCC providers are motivated to stay in their jobs because they are business owners and work for themselves, and approximately one in three FCC are motivated to stay in their jobs because of their ability to work from home. Notably, the reasons early educators did *not* typically note as primary factors that contribute to them staying in their jobs include pay and benefits, career advancement and professional development, tuition support, and job autonomy.

Frustrations. Similarly, early educators were asked to identify, from a list of 24 response items, their top three most significant job stressors and frustrations. Exhibit 5.5 displays the percent of educators who endorsed each option, with the three most frequently nominated factors highlighted for each job role.

Exhibit 5.5. Job Frustrations

	FCC Providers	Administrators	Teachers	Assistant Teachers
The pay	45%	51%	67%	63%
Too much paperwork	28%	34%	28%	20%
Children's challenging behavior	6%	18%	21%	25%
Teacher turnover	5%	28%	20%	24%
Lack of paid time off	35%	7%	17%	12%
Lack of health benefits	29%	16%	16%	28%
Lack of retirement benefits	40%	18%	13%	17%
Balancing work/family needs	16%	13%	13%	4%
Not enough staff in classrooms	1%	7%	11%	5%
Conflict with other teachers	1%	6%	11%	13%
Conflict with administrators	1%	3%	9%	6%
Not enough job autonomy	2%	2%	8%	2%
Too many training requirements	6%	7%	5%	6%
Managing staff	1%	12%	4%	0%
Conflict with families	5%	3%	4%	0%
Board management	1%	3%	2%	3%
Teacher supervision	0%	4%	2%	3%
Enrollment	3%	3%	2%	0%
Families pay late	11%	10%	2%	2%
Work schedule	11%	4%	2%	5%
Running a business in my home	14%	1%	1%	0%
Fiscal management	3%	10%	1%	0%
Moving classrooms to meet ratios	1%	4%	1%	3%

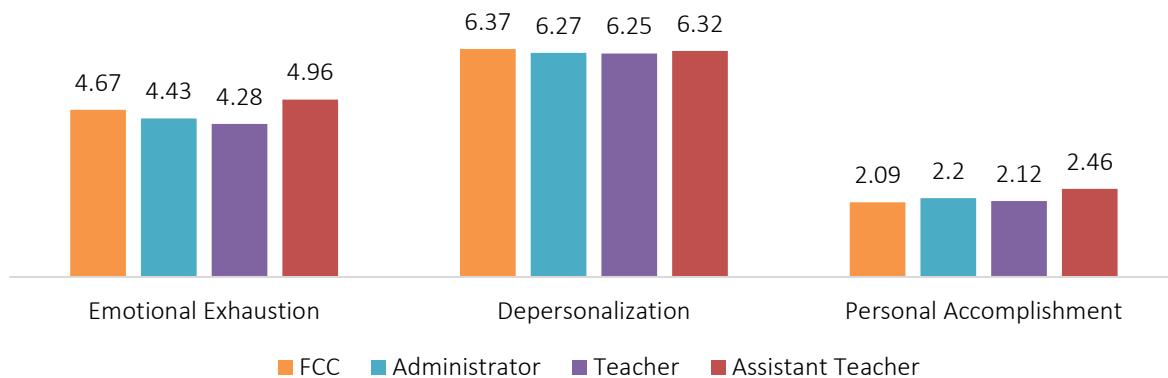
	FCC Providers	Administrators	Teachers	Assistant Teachers
Being sent home without pay due to child attendance	1%	1%	2%	8%

Across job roles, the most commonly reported reason that early educators feel frustrated in their jobs is the pay (45–67% across job roles). Relatedly, lack of benefits, including health benefits, paid time off, and retirement benefits, were also commonly cited frustrations, especially among FCC providers. Excessive paperwork, including reporting and monitoring requirements and child assessments, was another main source of stress, particularly among administrators and teachers. Additionally, administrators, teachers, and assistant teachers also indicate frustration stemming from a lack of support addressing children’s behavioral challenges, as well as high rates of teacher turnover. Teachers in community settings are significantly more likely to report unpredictable work schedules as a frustration as compared to teachers in public settings.

To what extent do early educators experience burnout and intend to leave their jobs?

Burnout. Given the frustrations experienced by educators, it is also worth exploring the extent to which they experience burnout. Burnout consists of emotional exhaustion, depersonalization, and lack of personal accomplishment. Emotional exhaustion represents the stress component of burnout, characterized by fatigue and feeling drained from work. Depersonalization represents the tendency to withdraw from the work, including becoming more detached in work relationships. Personal accomplishment refers to a feeling of efficacy and achievement at work. Individuals experiencing burnout feel less accomplished or successful (Maslach, Schaufeli, & Leiter, 2001). Early educators identified how often they experienced nine symptoms of burnout (three items each) on a 7-point scale, where 1 represented “every day” and 7 represented “never.” Results are summarized in Exhibit 5.6.

Exhibit 5.6. Average Burnout Component Scores by Job Role



On average, administrators and teachers feel emotionally exhausted “a few times a month” and FCC providers and assistant teachers feel emotionally exhausted “once a month or less.” In terms of depersonalization, all job roles feel that they experience symptoms “a few times a year.” Finally, FCC, administrators, and teachers feel personally accomplished, on average, “a few times a week.” Assistant teachers tend to feel personally accomplished “once a week.” Among teachers, symptoms of burnout did not significantly vary by sector.

Intention to Leave. Early educators were asked to indicate whether they planned to stay in their current jobs for at least the next two years. Responses are shown in Exhibit 5.7. FCC providers express the greatest intent to stay, with only 12% indicating intent to leave or uncertainty about whether they would stay in or leave their jobs. Among administrators, 22% indicate intent to leave within the next two years or uncertainty about their job intentions. Teachers and assistant teachers express the greatest intent to leave; 35% of teachers and 40% of assistant teachers indicate that they intend to leave their jobs or expressed uncertainty about staying in their jobs. Across all job roles, more early educators express uncertainty about job intentions than an intent to leave.

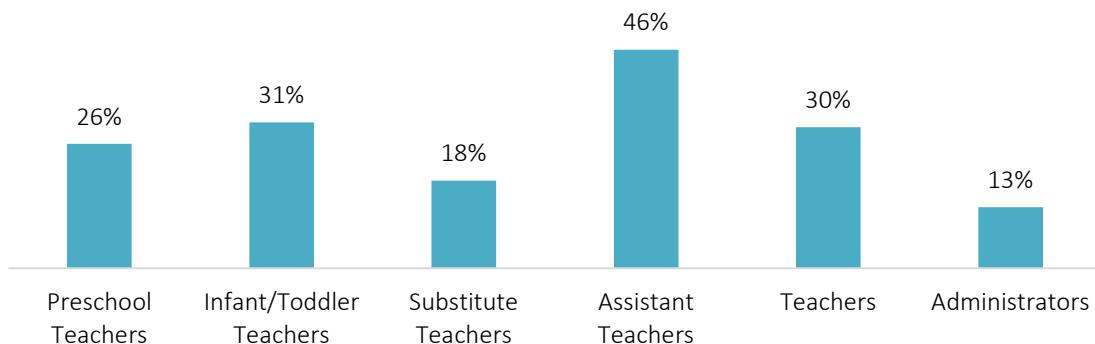
Exhibit 5.7. Job Intentions in the Next Two Years by Job Role

Job Role	Intend to Leave	Intend to Stay	Uncertain
FCC Providers	2%	88%	10%
Administrators	5%	77%	18%
Teachers	8%	65%	27%
Assistant Teachers	14%	60%	26%

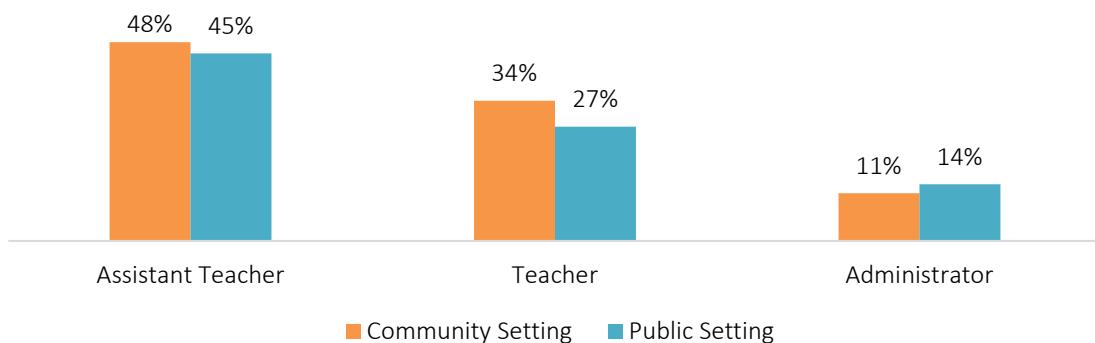
Teachers who work in community settings are significantly more likely to express uncertainty about their job intentions (43%) compared to teachers who work in publicly funded settings (22%).

What are the annual turnover rates of early educators and how long does it take to fill vacancies?

Turnover. Administrators in community and public settings reported the number of staff in various job roles who left their employment in the past year, as well as the total number of staff employed. This information was used to calculate annual turnover rates among six job roles—teachers, assistant teachers, substitutes, administrators, infant/toddler teachers, and preschool teachers. Annual turnover rates by job role are shown in Exhibit 5.8. Annual turnover is highest among assistant teachers, with nearly half (46%) of assistant teachers leaving during the year. Annual turnover among teachers is 30%, meaning close to one in three teachers left during the year. Turnover is lowest among substitute teachers (18%) and administrators (13%).

Exhibit 5.8 Average Annual Turnover Rates by Job Role

Turnover rates also appear similar among infant/toddler teachers (31%) and preschool teachers (26%). Turnover rates are also similar between teachers who work in community-based and publicly funded ECE programs (Exhibit 5.9).

Exhibit 5.9. Average Annual Turnover Rates by Job Role and Program Type

Filling Vacancies. Administrators were asked how long it takes, on average, to fill vacant positions. Administrators report that, across job roles, it takes approximately two months ($M = 1.76$, $SD = 1.58$) to fill vacancies. Responses range from less than one month to eight months.

What factors do early educators identify as important for retaining them in their jobs?

To better understand the working conditions and working environments that would promote early educators' retention, administrators, teachers, and assistant teachers were asked to identify the top three factors that would keep them in their jobs. Exhibit 5.10 displays their responses. The three most commonly nominated workplace factors by job role are highlighted. By far, the most important retention factor that early educators identify across job roles is higher pay, with at least 65% of early educators across job roles indicating that pay would be important

to their retention. Similarly, at least one in four educators, across job roles, indicate better benefits would also be an important factor in promoting retention. More respect for the profession was also identified as important. Many respondents indicated that “other” working conditions would be needed, but most do not specify what these other working conditions entail.

Exhibit 5.10. Working Conditions That Early Educators Report Promote Retention

	Administrators	Teachers	Assistant Teachers
Better pay	65%	69%	69%
Better benefits	27%	29%	26%
Other	29%	26%	28%
More respect for the profession	17%	25%	24%
A better supervisor	11%	14%	11%
More opportunities for paid professional development	11%	10%	10%
Working fewer hours	6%	9%	8%
Working on an academic calendar year	5%	7%	8%
A more predictable work schedule	4%	5%	8%
If it were easier to enroll families / fill slots	4%	4%	4%
If families paid on time	5%	4%	5%
Changes to standards	4%	3%	5%
Nothing	4%	2%	4%
Tuition support	1%	2%	1%

Conclusion

There are several positive findings worth noting. On average, this sample of early educators tends to view their work settings as more supportive and communicative and less bureaucratic and disruptive. Some job supports also seem to be in place, such as written job expectations, regular performance evaluations, and job orientations. Teachers and assistant teachers report relatively high rates of personal accomplishment and relatively low rates of depersonalization. However, on average, teachers in this sample experience symptoms of emotional exhaustion “a few times a month.” Job frustrations typically involve low pay and lack of benefits. Educators are not consistently receiving wage increases to adjust for cost of living, likely contributing to the financial strain reported in the previous chapter. Furthermore, ECE programs in this sample experience relatively high rates of turnover. Approximately one in two assistant teachers and one in three teachers leave their jobs annually, likely due to the frustrations they express related to compensation. Consistently, teachers and assistant teachers express the greatest intent to leave and the greatest uncertainty about staying in their jobs. Given that turnover can be time-consuming, costly, and stressful, and can have detrimental consequences for children, staff, administrators, and programs (Hale-Jinks et al., 2006; Whitebook & Sakai, 2003), efforts should

be made to minimize turnover as much as possible. According to early educators, increasing pay and benefits would be the most effective way to keep them in their jobs.

Chapter 6

Conclusion and Recommendations

The results of this study provide a detailed overview of the characteristics and experiences of a sample of early educators in Michigan. Several key findings emerged that have implications for practice and policy. It is important to emphasize that these conclusions are drawn from a sample of early educators and more information is needed regarding the full population of early educators in Michigan.

This study reveals many positive aspects of ECE in Michigan. For instance, early educators report feeling mostly prepared to do their jobs; they express a commitment to the children and families they work with, as well as a commitment to the profession. However, results also indicate significant sacrifices and struggles, especially related to job stability, compensation, and working conditions. Although this workforce demonstrates a commitment to the profession, they have less tenure at their current jobs and express uncertainty about staying in their current positions. Turnover rates are high, with approximately one in three teachers and one in two assistant teachers leaving annually. As a result, the following recommendations are offered as ways to promote a well-prepared, well-supported, thriving ECE workforce that is most capable of serving children and families in Michigan.

Increase the racial, ethnic, and linguistic diversity of early educators.

Nearly all early educators in the sample are white, and fewer than one in ten speak languages other than English. Ten percent of teachers in community and public settings report having children in their classroom whose primary language is not spoken by *any* staff in the program, which likely poses barriers to communicating with and educating all children. As the racial, ethnic, and linguistic diversity of Michigan's young population grows (Mack, 2017; Montemurri & Turner, 2014; Park et al., 2017), efforts should be made to increase diversity among the early education workforce, especially in light of findings that outcomes are improved when a student's race/ethnicity matches that of his/her teacher (e.g., Dee, 2005; Downer et al., 2016; Wright et al., 2017). State policy makers and program leaders should consider using targeted recruitment efforts—for instance, creating scholarship opportunities for teachers or prospective teachers of



color, as well as linguistically diverse teachers. One strategy that has been effective in the K–12 sector offers a promising model for early education. Similar to the “NxtGen” scholarship program at the University of Colorado Denver, diverse high school students who are interested in early education could receive scholarships for a bachelor’s degree with Early Childhood Education (ZA) or Early Childhood General and Special Education (ZS) endorsements. In turn, scholarship recipients could commit to work part-time, while in school, as paraprofessionals in early childhood programs, and move into teaching positions upon graduation. Important to note, however, well-intentioned recruitment and retention efforts may be futile if compensation and working conditions do not improve, which is discussed in more detail below.

Ensure early educators feel prepared to work with all children, especially dual language learners.

Aside from lacking linguistic diversity, this sample of early educators also felt the *least* prepared to work with dual language learners than any other group of children (e.g., children with disabilities, children experiencing trauma, etc.). This finding is particularly concerning given that approximately 15% of young children in Michigan are dual language learners (Park et al., 2017), an estimate that is likely to grow in coming years (Montemurri & Tanner, 2014). Unfortunately, this finding is not surprising given national findings showing a lack of content focus on dual language learners in teacher preparation programs (Ray, Bowman, & Robbins, 2006). One potential way to enhance early educators’ knowledge is to require dual language learning coursework and in-service professional development in Michigan’s Great Start Quality Rating and Improvement System. When specific standards are included in state-level accountability systems, institutions of higher education are more likely to create and deliver coursework related to the standards (Darling-Hammond, 2000). Concerted efforts must also be made to build capacity among teacher educators, who often lack expertise in dual language learning (Copeman Petig et al., 2018); as such, professional development opportunities for teacher educators and recruiting and retaining diverse teacher educators is especially important.

Make professional development opportunities more accessible to early educators across settings.

Early educators experience numerous barriers to professional development (PD), which suggest that PD needs to be more accessible. In particular, in-service PD needs to be more financially accessible to educators across settings; common barriers include expense, lack of paid time off, and lack of substitute coverage. Early educators across settings identify tuition support as the most desired support for increasing their accessibility to formal degree programs. In the current sample, 45% of FCCs and 42% of assistant teachers report not having a formal degree (A.A., B.A., or graduate degree), yet only 18% of assistant teachers and 15% of FCC providers report that T.E.A.C.H. scholarships were available to them. It is possible that the early educators who may benefit most from scholarship opportunities may not know they exist or how to utilize them. Early educators also identified the need for more advisement, particularly financial advisement. Thus, efforts could be made at the local Great Start Council level to employ college/career

counselors to help early educators access financial support, advisement, and academic tutoring. One model to explore is the Los Angeles Universal Preschool's Workforce Initiative, which provides financial, academic, and career supports to working early educators to foster degree persistence and reduce financial strain (Whitebook, Schaack, Kipnis, Austin, & Sakai, 2013).

Additionally, many educators desire more convenient class times and more online class options to be able to pursue degrees. Increasing the accessibility of PD could be accomplished by creating more modules or online trainings available through the MiRegistry for little to no cost to participants. Trainings should be consistent with early learning or Great Start to Quality (QRIS) system standards and can be linked to various incentives, such as quality ratings, reimbursement rates, bonuses, and the like. To create more online coursework for early educators, institutions of higher education, including community colleges, could compete for grants to transform face-to-face courses into online or hybrid formats. PD and coursework should be designed for working professionals and must be available to educators across settings and across the state.

Improve working conditions for early educators across settings, especially wages and benefits.

Although the average early educator in this sample reports significant experience and advanced education, median wages appear to be more consistent with entry-level positions, suggesting wages are relatively stagnant. In fact, FCC providers report median wages equal to Michigan's minimum wage, which are insufficient to support a family of two, and few early educators receive wage increases to adjust for the cost of living. Although there does appear to be some opportunities for wage growth when looking at positions within centers and schools, even the highest positions within this hierarchy, those held by administrators, report financial hardship and reliance on public assistance. A staggering 93% of the total sample report utilizing some form of public assistance and express "some" difficulty paying bills. From a list of 24 options, wages are identified, across job roles, as the most frustrating aspect of the work. Relatedly, wage increases are the most commonly identified way to promote staff retention and reduce turnover. As a result, Michigan stakeholders should explore ways to sustainably increase early educator wages, as well as benefits, across settings. Stakeholders could consider incorporating compensation into their QRIS system as an indicator of quality. For instance, centers who provide higher pay and/or comprehensive benefits packages could receive higher ratings within the system. It is important to note, however, that ECE settings are often financially constrained and, thus, incentivizing higher compensation may not create change unless funds are devoted to supporting the ECE workforce. One way to increase funding devoted to wages could involve increasing Child Care and Development Block Grant funded subsidy reimbursement rates and specifically earmarking increases for salaries. Another strategy could include non-refundable tax credits linked to early educators' MiRegistry tier. In Michigan, changes in funding formulas are mostly decided by administration and the legislature. As such, leadership is needed to prioritize early educator wages in advocacy and policy efforts. In reality, multiple policy solutions must be explored as different sectors require different solutions. Therefore, dedicated leadership is needed to create a common vision and real solutions.

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Appendix A

List of Michigan Counties by Region

Western Michigan	UP and Northern LP	Eastern or East Central	Southeast Michigan
Allegan	Alcona	Michigan	Branch
Barry	Alger	Arenac	Hillside
Berrien	Alpena	Bay	Jackson
Calhoun	Antrim	Clair	Lenawee
Cass	Baraga	Clare	Livingston
Ionia	Benzie	Clinton	Macomb
Joseph	Charlevoix	Eaton	Monroe
Kalamazoo	Cheboygan	Genesee	Oakland
Kent	Chippewa	Gladwin	Washtenaw
Lake	Crawford	Gratiot	
Mason	Delta	Huron	Wayne
Mecosta	Dickinson	Ingham	
Montcalm	Emmet	Isabella	
Muskegon	Gogebic	Lapeer	
Newaygo	Grand Traverse	Midland	
Oceana	Houghton	Saginaw	
Osceola	Iosco	Sanilac	
Ottawa	Iron	Shiawassee	
Van Buren	Kalkaska	Tuscola	
	Keewenaw		
	Leelanau		
	Luce		
	Mackinac		
	Manistee		
	Marquette		
	Menominee		
	Missaukee		
	Montmorenc		
	Ogemaw		
	Ontonagon		
	Oscoda		
	Otesgo		
	Presque Isle		
	Roscommon		
	Schoolcraft		
	Wexford		

Appendix B

Demographic and Educational Characteristics by Region

Exhibit B.1. Descriptive Statistics for Age and Experience Levels by Job Role by Region

Job Role	Western		UP and Northern LP		Southeast		Eastern or East Central	
	M (SD)	Range	M (SD)	Range	M (SD)	Range	M (SD)	Range
Family Child Care Providers								
Age	42.93 (10.54)	18–65	42.92 (10.16)	18–69	46.11 (11.59)	19–70	45.95 (10.18)	20–61
Years in current position	12.67 (10.19)	0–34	13.49 (9.43)	0–36	14.32 (11.62)	0–44	15.18 (9.13)	0–42
Years in the ECE field	16.70 (10.17)	0.50	16.57 (8.24)	0–44	17.99 (11.44)	0–50	19.89 (9.5)	0–50
Administrators								
Age	42.47 (10.69)	23–62	43.31 (10.05)	24–64	44.39 (11.26)	24–79	42.10 (11.39)	25–62
Years in current position	7.52 (7.38)	0–33	5.81 (4.82)	0–21	7.7 (7.6)	0–36	7.76 (8.26)	0–29
Years in the ECE field	17.24 (9.77)	1–50	17.96 (8.18)	1–44	17.01 (10.38)	1–45	17.40 (10.53)	0–44
Teachers								
Age	39.87 (13.08)	18–64	39.01 (9.79)	24–55	37.93 (11.74)	20–62	38.93 (11.03)	21–64
Years in current position	5.86 (4.76)	0–20	3.27 (3.57)	0–16	5.44 (6.12)	0–30	6.41 (6.93)	0–35
Years in the ECE field	11.86 (8.34)	0–35	12.89 (8.15)	0–44	13.53 (9.67)	1–38	13.5 (8.58)	1–41
Assistant Teachers								
Age	38.79 (11.88)	20–61	42.09 (15.20)	19–73	42.08 (13.70)	20–73	38.39 (14.56)	19–67
Years in current position	5.93 (6.94)	0–45	9.21 (10.26)	0–35	3.43 (3.84)	0–12	3.91 (4.78)	0–20
Years in the ECE field	7.69 (7.33)	0–50	13.28 (10.19)	2–36	9.86 (8.42)	1–28	10.26 (11.08)	0–38

Exhibit B.2. Racial/Ethnic Distribution of the Early Educator Workforce Sample by Region

	Western	UP and Northern LP	Southeast	Eastern or East Central
Family Child Care Providers				
Black	2%	0%	26%	3%
Hispanic	0%	0%	0%	1%
White	97%	98%	67%	94%
Other race	1%	2%	8%	3%
Administrators				
Black	2%	0%	15%	2%
Hispanic	2%	0%	1%	5%
White	96%	100%	77%	93%
Other race	0%	0%	6%	0%
Teachers				
Black	3%	0%	9%	4%
Hispanic	3%	0%	5%	0%
White	86%	95%	83%	91%
Other race	7%	5%	20%	6%
Assistant Teachers				
Black	0%	0%	0%	9%
Hispanic	7%	0%	0%	4%
White	86%	94%	93%	87%
Other race	7%	6%	7%	0%

Exhibit B.3. Educational Attainment of the Early Educator Workforce Sample by Region

	Western	UP and Northern LP	Southeast	Eastern or East Central
Family Child Care Providers				
High school diploma	15%	13%	10%	11%
Some college	34%	41%	22%	46%
AA	18%	15%	29%	21%
BA	29%	24%	27%	16%
MA or higher	4%	7%	13%	6%
Administrators				
High school diploma	0%	0%	0%	0%
Some college	7%	11%	12%	8%
AA	16%	10%	5%	15%
BA	42%	38%	45%	44%
MA or higher	34%	41%	38%	32%
Teachers				
High school diploma	10%	0%	2%	2%
Some college	10%	5%	11%	6%
AA	10%	21%	17%	19%
BA	48%	64%	40%	57%
MA or higher	21%	10%	30%	17%
Assistant Teachers				
High school diploma	10%	6%	21%	9%
Some college	26%	37%	43%	23%
AA	19%	47%	14%	36%
BA	29%	3%	14%	28%
MA or higher	16%	7%	7%	4%

Appendix C

Professional Development Experiences and Needs by Region

Exhibit C.1. Average Feelings of Preparation for Teachers and Provider by Region—*M (SD)*

	Western	UP and Northern LP	Eastern or East Central	Southeast
Teachers				
Support language development	3.28 (0.69)	3.22 (0.67)	3.38 (0.65)	3.42 (0.67)
Implement Math/Science curricula	3.24 (0.79)	3.19 (0.65)	3.23 (0.67)	3.35 (0.69)
Implement Creative Arts curricula	3.41 (0.67)	3.08 (.071)	3.27 (0.71)	3.43 (0.65)
Conduct observations	3.40 (0.58)	3.42 (0.68)	3.41 (0.64)	3.45 (0.68)
Use assessment results	3.30 (0.67)	3.38 (0.70)	3.35 (0.64)	3.40 (0.66)
Work with families	3.47 (0.60)	3.54 (0.62)	3.58 (0.49)	3.61 (0.54)
FCC Providers				
Support language development	3.17 (0.77)	3.12 (0.75)	3.17 (0.68)	3.21 (0.79)
Implement Math/Science curricula	3.03 (0.78)	3.12 (0.77)	3.13 (0.79)	3.08 (0.84)
Implement Creative Arts curricula	3.13 (0.83)	3.15 (0.74)	3.38 (0.71)	3.21 (0.80)
Conduct observations	3.04 (0.78)	2.78 (0.86)	3.17 (0.86)	2.98 (0.88)
Use assessment results	2.92 (0.89)	2.67 (0.95)	3.01 (0.92)	2.92 (0.99)
Work with families	3.41 (0.61)	3.35 (0.66)	3.63 (0.65)	3.54 (0.63)
Assistant Teacher				
Support language development	3.04 (1.06)	3.05 (0.78)	3.00 (0.85)	2.98 (0.70)
Implement Math/Science curricula	2.86 (0.99)	2.95 (0.82)	2.92 (0.76)	2.90 (0.66)
Implement Creative Arts curricula	3.02 (1.00)	3.05 (0.86)	3.03 (0.71)	3.09 (0.64)
Conduct observations	3.18 (0.92)	3.21 (0.83)	3.04 (0.86)	3.16 (0.71)
Use assessment results	3.01 (1.00)	2.92 (0.90)	2.83 (0.96)	3.24 (0.61)

Work with families	3.22 (0.88)	3.21 (0.81)	3.42 (0.60)	3.35 (0.61)
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Exhibit C.2. Average Feelings of Preparation for Administrators by Region

	<i>M (SD)</i>			
	Western	UP and Northern LP	Eastern or East Central	Southeast
Supervisory Tasks	3.19 (0.59)	3.23 (0.48)	3.08 (0.52)	3.29 (0.54)
Managerial Tasks	2.91 (0.61)	2.89 (0.65)	2.76 (0.66)	3.10 (0.68)
Family-Related Tasks	3.15 (0.56)	3.39 (0.52)	3.13 (0.65)	3.36 (0.59)

Exhibit C.3. Average Satisfaction with PD by Region—*M (SD)*

Western	UP and Northern LP	Eastern or East Central	Southeast
4.08 (0.78)	4.00 (0.86)	4.22 (0.68)	4.17 (0.72)

Exhibit C.4. Preferred PD Modality by Region

	<i>M (SD)</i>			
	Western	UP and Northern LP	Eastern or East Central	Southeast
Face-to-face, group PD	67%	77%	75%	76%
Online PD	68%	50%	62%	60%
On-the-job mentoring or coaching	27%	35%	36%	34%

Exhibit C.5. Percent of Teachers Endorsing “It is usually too far away” as a Barrier to PD

Western	UP and Northern LP	Eastern or East Central	Southeast

7%

26%

10%

14%

Exhibit C.6. Percent of Early Educators Identifying Needed Supports by Region

	<i>M (SD)</i>			
	Western	UP and Northern LP	Eastern or East Central	Southeast
More online class options	24%	53%	39%	33%
More convenient class locations	5%	21%	17%	11%
Child care	6%	11%	15%	15%

Appendix D

Compensation by Region

Exhibit D.1. Regional Wages by Job Role

	Mean	Median	Std Dev	Min.	Max.
Western					
FCC Providers	\$11.01	\$ 9.25	\$4.63	\$9.25	\$33.00
Assistant Teachers	\$11.84	\$11.55	\$2.13	\$9.25	\$16.47
Teachers	\$19.40	\$18.48	\$6.82	\$9.25	\$33.00
Administrators	\$14.48	\$14.72	\$5.49	\$9.25	\$33.00
UP and Northern LP					
FCC Providers	\$11.33	\$ 9.25	\$5.71	\$9.25	\$33.00
Assistant Teachers	\$11.78	\$11.75	\$1.94	\$9.25	\$15.33
Teachers	\$21.02	\$22.10	\$5.56	\$9.25	\$33.00
Administrators	\$17.20	\$17.85	\$4.62	\$9.25	\$33.00
Eastern or East Central					
FCC Providers	\$11.28	\$ 9.25	\$4.93	\$9.25	\$33.00
Assistant Teachers	\$11.96	\$12.00	\$1.73	\$9.25	\$16.00
Teachers	\$18.70	\$18.29	\$6.02	\$9.25	\$33.00
Administrators	\$15.43	\$15.00	\$4.81	\$9.25	\$33.00
Southeast					
FCC Providers	\$11.01	\$ 9.25	\$5.82	\$9.25	\$33.00
Assistant Teachers	\$12.88	\$12.19	\$3.01	\$9.40	\$20.00
Teachers	\$20.25	\$20.10	\$6.47	\$9.25	\$33.00
Administrators	\$15.56	\$15.00	\$3.80	\$9.25	\$25.25

Exhibit D.2. Percent Meeting Threshold for a Living Wage by Job Role

	1 Adult	1 Adult, 1 Child
Western		
FCC Providers	25%	4%
Assistant Teachers	60%	0%
Teachers	76%	7%
Administrators	88%	27%
UP and Northern LP		
FCC Providers	19%	7%
Assistant Teachers	63%	0%

Teachers	90%	6%
Administrators	93%	59%
Eastern or East Central		
FCC Providers	26%	4%
Assistant Teachers	70%	0%
Teachers	81%	7%
Administrators	92%	27%
Southeast		
FCC Providers	22%	6%
Assistant Teachers	64%	0%
Teachers	89%	2%
Administrators	92%	36%

Exhibit D.3. Percent with Benefits by Region

	Western	UP and Northern LP	Eastern or East Central	Southeast
Health insurance	52%	51%	61%	53%
Dental insurance	42%	42%	52%	46%
Short-term disability insurance	16%	15%	27%	27%
Long-term disability insurance	12%	11%	26%	20%
Vision insurance	33%	33%	47%	39%
Retirement plan	25%	29%	35%	30%
At least two weeks of paid time off	35%	28%	39%	35%
At least five paid holidays	52%	40%	55%	54%
Paid professional development	37%	35%	54%	42%
Tuition support	15%	19%	13%	16%
Reduced rate / free child care	18%	13%	17%	22%
Flexible spending account	11%	6%	17%	14%
No benefits	17%	24%	17%	17%

Exhibit D.4. Percent Second Job and Public Subsidy Recipient by Region

	Second Job	Public Subsidy Recipient
Western		
FCC Provider	11%	92%
Assistant Teacher	10%	93%
Teacher	16%	91%
Administrator	24%	94%
UP and Northern LP		
FCC Provider	16%	94%
Assistant Teacher	6%	95%

Teacher	21%	90%
Administrator	31%	94%
Eastern or East Central		
FCC Provider	21%	95%
Assistant Teacher	31%	97%
Teacher	28%	90%
Administrator	30%	93%
Southeast		
FCC Provider	16%	91%
Assistant Teacher	21%	96%
Teacher	27%	92%
Administrator	23%	96%

Appendix E

Working Conditions, Turnover, and Burnout by Region

Exhibit E.1. Job Intentions for the Next Two Years by Job Role and Region

		<i>M (SD)</i>		
	Western	UP and Northern LP	Eastern or East Central	Southeast
FCC Provider				
Leave	4%	1%	3%	1%
Stay	85%	90%	88%	90%
Unsure	11%	9%	9%	9%
Administrator				
Leave	4%	9%	8%	2%
Stay	83%	82%	65%	79%
Unsure	13%	9%	27%	20%
Teacher				
Leave	3%	0%	6%	13%
Stay	72%	73%	68%	57%
Unsure	24%	27%	26%	30%
Assistant Teacher				
Leave	15%	12%	13%	14%
Stay	53%	69%	65%	49%
Unsure	32%	18%	22%	37%

Exhibit E.2. Annual Turnover Rates by Job Role & Region

		<i>M (SD)</i>		
	Western	UP and Northern LP	Eastern or East Central	Southeast
Teachers				
Teachers	29%	35%	25%	31%
Assistant Teachers	45%	55%	42%	44%
Substitute Teachers	18%	27%	10%	19%
Administrators	14%	12%	14%	11%
Infant/Toddler Teachers	30%	50%	18%	31%
Preschool Teachers	24%	27%	29%	25%

Exhibit E.3. Average Months to Fill Vacancies by Region

	Mean	SD	Range
Western	1.87	1.45	0–8
UP and Northern LP	1.39	1.59	0–8
Eastern or East Central	1.75	1.51	0–8
Southeast	1.86	1.70	0–8